

78744  
JAIPUR.  
Public Works  
report 1901.

## RAJASTHAN UNIVERSITY LIBRARY

DATE LABEL (Ac)

Call No. 71-282717

*Date of Release  
for loan*

Accn. No. 7874.4

This book should be returned to the library on or before the date last stamped below.

[illegible]



JAIPUR STATE.

COMPLIMENTARY

PUBLIC WORKS REPORT

FOR THE

Year ending 31st December 1901.

---

Allahabad

PRINTED AT THE PIONEER PRESS

1902



# INDEX.

PARA.	GENERAL REMARKS.	Page.
1	Expenditure ... ..	1
2	Supervision ... ..	1
3	Plans ... ..	2
4	Estimates ... ..	2
5	Final Bills ... ..	2
6	Estimates checked ... ..	2
7	Work in Office ... ..	2
8	Cash balances ... ..	2
9	Stock ... ..	3
10	Savings ... ..	3
11	Revenue remitted ... ..	3
12	Raj Imarut ... ..	3
13	Gas Works ... ..	4
14	State Cotton Press, Jaipur ... ..	4
15	„ „ „ Mandaor ... ..	5
16	City Conservancy... ..	5
17	Ice ... ..	5
18	Lime ... ..	5
19	Stone-cutters' Yard ... ..	5
20	Workshops ... ..	5
21	Ram Newas Garden—Expenditure—Construction—Receipts—Issues—Plants and Seeds received—Acclimatised Seeds—Vegetables—Flowers—Plants— Rose Garden—Flower Show—Apprentice boys—Zoological Section—Pre- sent state—Expenditure. ... ..	6
22	Surveys ... ..	8
23	Journals ... ..	9
24	Personal ... ..	9
25	Designs prepared ... ..	10
26	Rainfall and Ratio of run off ... ..	10
27	Irrigation Commission ... ..	10
28	Raj Observatory ... ..	10
29	Jaipur Sewai-Madhopur Railway—General Remarks—Earthwork—Bridge Work—Road Crossings—Ballast Collection—Permanent Way—Station Build- ings—Testimony to the Assistant Engineer and Staff—Engineering and Clerical—Work in the Office—Statement of Expenditure ... ..	11
30	Overseers and Sub-Overseers ... ..	13
31	Office Establishment ... ..	13

## II.—ORIGINAL WORKS AND REPAIRS.

32	Statement showing Works done and Expenditure on each at Jaipur—Jail— Mayo Hospital—Supdg. Engineer's House—Residency ... ..	14
33	In Shekhawati—4 New Thanas ... ..	14
34	Additions or Repairs to 9 Dispensaries ... ..	14
	„ „ 3 Thanas ... ..	14
	„ „ Cotton Press ... ..	14
	„ „ 7 Rest Houses ... ..	14
	„ „ 1 Post Office ... ..	14
	„ „ Custom House ... ..	14

## III.—ROADS.

35	General Abstract—Maintenance cost per mile	...	...	..	14
36	City and Environs	...	...	...	15
37	Naila Branch	...	...	...	15
38	Agra Road	...	...	...	15
39	Ajmer Road	...	...	...	16
40	Nirana-Malpura Road	...	...	...	17
41	Jaipur-Tonk Road	...	...	...	17
42	Link to Chatsu Station	...	...	...	17
43	Kothun-Lalsote Road	...	...	...	17
44	Dosa and Sewai-Madhopur Road	...	...	...	17
45	Lalsot-Gungapur	...	...	...	18
46	Gungapur-Malarna	...	...	...	18
47	Buswa	...	...	...	18
48	Mandaor-Kerauli	...	...	...	18
49	Hindaun-Gungapur	...	...	...	18
50	Lanka Ghata Road	...	...	...	18
51	Branch to Parao at Mhowa	...	...	...	18
52	Jaipur to Ramgarh	...	...	...	18

## IV.—IRRIGATION.

53	Number of Works completed and in progress—Length of ducts—Statement of details	...	...	...	...	19
54	Expenditure	...	...	...	...	19
55	Revenue	...	...	...	...	19
56	Charges for Supervision	...	...	...	...	19
57	Areas irrigated by Flow and Lift—Single and double Crops—Khaṣa and Jaghir,					20
58	Rainfall	...	...	...	...	20
59	Diagram showing Rainfall—Expenditure—Returns	...	...	...	...	20
60	Lawa—Tanks made and results	...	...	...	...	20
61	Ramgarh or Crosthwaite Sagur	...	...	...	...	22
62	Kautli Inundation Cut	...	...	...	...	22
63	Sheodungri Bund	...	...	...	...	23
64	Halolao, Newai	...	...	...	...	23
65	Rabaota	...	...	...	...	23
66	Chandlai	...	...	...	...	23
67	Sanganir	...	...	...	...	23
68	Bhagwantgarh Bund	...	...	...	...	23
69	Khiri	...	...	...	...	23
70	Bhairon Talao near Thulli	...	...	...	...	23
71	Sainthal Sagur	...	...	...	...	23
72	Shendoli Supply Cut	...	...	...	...	23
73	„ Bund	...	...	...	...	24
74	Bankri Talao	...	...	...	...	24
75	Dhund at Burial	...	...	...	...	24
76	Bijey Sagur Buswa	...	...	...	...	24
77	Gudha Tank	...	...	...	...	24
78	Kund Jatoli	...	...	...	...	24
79	Gaitolao	...	...	...	...	24
80	Haripura	...	...	...	...	24
81	Mora Sagur	...	...	...	...	24
82	Kund Mora	...	...	...	...	24
83	Nazimwala Bamanwas	...	...	...	...	24
84	Nya Talao	...	...	...	...	24

PARA.							Page.
85	Binouri Sagur	...	...	...	...	...	24
86	Liwali	...	...	...	...	...	24
87	Nigoh Sagur	...	...	...	...	...	25
88	Ram Sagur Malarna	...	...	...	...	...	25
89	Jai Sagur Tond	...	...	...	...	...	25
90	Dhund	...	...	...	...	...	25
91	Dehulra	...	...	...	...	...	25
92	Durga Sagur	...	...	...	...	...	25
93	Naglao	...	...	...	...	...	25
94	Baragaon	...	...	...	...	...	25
95	Moti Sagur	...	...	...	...	...	25
96	Ram Talao	...	...	...	...	...	25
97	Beniwala Udai	...	...	...	...	...	25
98	Johriwala	...	...	...	...	...	25
99	Shameshpur	...	...	...	...	...	25
100	Salempur	...	...	...	...	...	25
101	Rondh Jagrampura	...	...	...	...	...	25
102	Kot Bund	...	...	...	...	...	25
103	Hurla Bund	...	...	...	...	...	25
104	Madho Sagur	...	...	...	...	...	25
105	Gundal	...	...	...	...	...	25
106	Bara Talao	...	...	...	...	...	25
107	Hodaheli	...	...	...	...	...	25
108	Bishun Samund	...	...	...	...	...	25
109	Fateh Sagur	...	...	...	...	...	25
110	Kiria Tank Phaggi	...	...	...	...	...	26
111	New Mandi Tank	...	...	...	...	...	26
112	Pachala Talao	...	...	...	...	...	26
113	Churu Sagur	...	...	...	...	...	26
114	Dholai	...	...	...	...	...	26
115	Bodea Talao	...	...	...	...	...	26
116	Govindi Tank	...	...	...	...	...	26
117	Bagait Tank	...	...	...	...	...	26
118	Sahadra „	...	...	...	...	...	26
119	Renwal „	...	...	...	...	...	26
120	Augur Sagur	...	...	...	...	...	26
121	Chaparwara Sagur	...	...	...	...	...	26
122	Hingona Weir	...	...	...	...	...	26
123	Kheri Weir	...	...	...	...	...	27
124	Fariadpura Kund	...	...	...	...	...	27
125	Kala Talao, Nirana	...	...	...	...	...	27
126	Moti Sagur Churu	...	...	...	...	...	27
127	Akheypura Branch	...	...	...	...	...	27
128	Chaparwara Canals	...	...	...	...	...	27
129	Kalegh Sagur „	...	...	...	...	...	27
130	Maintenance	...	...	...	...	...	27
131	Bhairon Sagur Chandsen	...	...	...	...	...	27
132	Rampura Tank	...	...	...	...	...	28
133	Kala Nada	...	...	...	...	...	28
134	Gopipura	...	...	...	...	...	28
135	Utarna	...	...	...	...	...	28
136	Hoshapura	...	...	...	...	...	28
137	Bainra Tank	...	...	...	...	...	28
138	Khuara	...	...	...	...	...	28
139	Napolao Bugri	...	...	...	...	...	28



PARA.								Page.
140	Sawantgurh	...	...	...	...	...	...	28
141	Punwar	...	...	...	...	...	...	29
142	Nasrida	...	...	...	...	...	...	29
143	Gangolao	...	...	...	...	...	...	29
144	Rupabaili	...	...	...	...	...	...	29
145	Tori Sagur Canals—L. L. North Canal	...	...	...	...	...	...	29
146	Turbines	...	...	...	...	...	...	29
147	R. Mashi South Supply Cut	...	...	...	...	...	...	29

#### V.—MISCELLANEOUS PUBLIC IMPROVEMENTS.

148	Water Works—Water raised—Daily average compared with previous years— Consumption per head—Cost per 1,000 gallons—Details of Charges—Fuel consumed—Cost of clearing Filters—Service Reservoir—Boilers, &c —Repairs	...	...	...	...	...	...	29
149	Work done by the Engines	...	...	...	...	...	...	30
150	Taps erected	...	...	...	...	...	...	34
151	Income and Expenditure	...	...	...	...	...	...	34
152	State of the Reservoir	...	...	...	...	...	...	34

#### APPENDICES.

A.	Abstract of Receipts and Expenditure	...	...	...	...	...	...	36
B.	Statement of Works carried out in 1901	...	...	...	...	...	...	38
C.	„ Roads	...	...	...	...	...	...	56
D.	„ Imperial Works	...	...	...	...	...	...	57
E.	„ showing expenditure and return on Irrigation	...	...	...	...	...	...	58
F.	Irrigation Statement of N. & E. District	...	...	...	...	...	...	72
G.	„ „ W. and S. „	...	...	...	...	...	...	75
H.	List of Final Bills submitted to Raj in 1901	...	...	...	...	...	...	78
I.	Rainfall	...	...	...	...	...	...	80

#### REPORT ATTACHED.

Lala Rup Chand, Assistant Engineer.

# JAIPUR STATE. PUBLIC WORKS REPORT

FOR THE

*Year ending 31st December 1901.*

## I.—GENERAL REMARKS.

1. **Expenditure.**—The expenditure for the year ending 31st December 1901, has been as follows :—

				Rs.	a.	p.	Rs.	a.	p.
New Works	...	...	...	...			22,555	4	6
Repairs	...	...	...	...			1,03,432	14	7
Irrigation	...	...	...	...			2,56,187	3	0
Miscellaneous Public Improvements	...	...	...	...			70,732	5	0
City Water Supply	...	...	...	...			46,792	15	11
State Cotton Press—									
Jaipur	{	Capital Account	...	—5	5	4	—5	5	4
		Maintenance	...	25,945	6	0	25,945	6	0
Mandaor	{	Capital Account	...	943	14	1	15,370	10	7
		Maintenance	...	14,426	12	6			
Gas Works	...	...	...	...			34,873	6	9
Establishment	...	...	...	...			66,981	8	2
Imarut works	...	...	...	...			61,093	1	1
Other State Works	...	...	...	...			3,053	4	3
Miscellaneous other items *	...	...	...	...			42,168	13	10
Total			...	...			7,49,171	8	4
Jaipur Sewai-Madhopur Railway			...	...			1,25,261	1	0
GRAND TOTAL			...	...			8,74,432	9	4

2. **Supervision.**—The total for supervision of works amounts to Rs.1,01,103. Deducting this from the total outlay, it gives a percentage of 13·07, as shown at foot.† The percentage depends mainly on the amount sanctioned. It should be noted too that in addition to supervising works the establishment is also employed in the preparation of new projects, which do not represent expenditure.

\* This is the total amount of bills issued during 1901 for works, &c., done for private individuals and certain other items noted in Appendix A.

† Taking percentage of Establishment on Sanctioned Works :—

$$8,74,433 : 100 :: 66,982 : 7·66$$

Adding cost of extra establishment, which is Rs. 34,121—

$$66,982 + 34,121 = 1,01,103.$$

Actual expenditure on works minus extra establishment—

$$8,07,451 - 34,121 = 7,73,330.$$

$$7,73,330 : 100 :: 1,01,103 : 13·07$$

that is, after deducting the sanctioned and extra establishment from the whole expenditure, the cost of supervision and control on the actual outlay for works comes to 13·07.

3. **Plans.**—There were 374 plans prepared in the Drawing Office, comprising 167 original designs and 207 tracings, besides 66 plans drawn and submitted by Overseers.

4. **Estimates.**—The number prepared during the year was—

			No.	Rs.	a.	p.
In the P. W. D.	...	...	566	8,04,938	12	0
„ Imarut	...	...	85	83,577	7	2
„ Gas Works	...	...	3	12,124	5	3
Total	...	...	654	9,00,640	8	5

5. **Final Bills.**—The number submitted during the year was—

			No.	Rs.	a.	p.
In the P. W. D.	...	...	85	2,25,328	10	7
„ Imarut	...	...	155	61,745	1	1
„ Gas Works	...	...	1	88	7	9
Total	...	...	241	2,87,162	3	5

6. **Estimates checked—**

			No.
In the P. W. D.	...	...	60
„ Imarut	...	...	85
„ Gas Works	...	...	3
Total	...	...	148

7. **Work in Office—**

<i>English.</i>			No.
Letters or papers received	...	...	3,976
„ „ despatched	...	...	4,080
Vernacular „ disposed of	...	...	2,353
Day-books checked	...	...	2,414
Ledger heads kept	...	...	588
Muster rolls checked	...	...	5,238
Bills of contractors and others and vouchers	...	...	4,385
<i>Persian.</i>			No.
Papers received	...	...	12,348
„ despatched	...	...	6,192

8. **Cash Balances.**—Outstanding against this office on 31st August 1901—

				Rs.	a.	p.
Cash	...	...	...	59,495	4	4
Advances	...	...	...	1,78,789	13	8
Stock General	...	...	...	60,578	11	1
„ City Water Supply	...	...	...	48,685	9	3
Imarut Works	...	...	...	236	0	8
Works carried out on Sanction—funds to be provided and adjustable next year	...	...	...	1,30,772	14	5
Miscellaneous	...	...	...	534	4	5
Total	...	...	...	4,79,092	9	10

## 9. Stock.—The total value on 31st December 1901—

					Rs.	a.	p.
City Works	...	...	...	...	7,849	2	7
Tools	...	...	...	...	10,426	12	5
Plant and Machinery	...	...	...	...	156	5	6
Instruments	...	...	...	...	1,761	15	11
Tents and Office Furniture	...	...	...	...	492	2	1
Small stores, Metal, &c.	...	...	...	...	26,660	6	2
Timber	...	...	...	...	3,948	14	7
House Fittings	...	...	...	...	1,209	2	0
Miscellaneous	...	...	...	...	6,528	8	7
Total	...	...	...	...	58,533	5	10

## 10. Savings and unexpended balances remitted to the Raj Treasury were—

					Rs.	a.	p.
On account of the P. W. D.	...	...	...	...	61,246	5	2
„ „ Imarat	...	...	...	...	4,946	14	0
„ „ Gas Works	...	...	...	...	...	...	...
„ „ Cotton Press, Jaipur	...	...	...	...	...	...	...
„ „ „ Mandaor	...	...	...	...	...	...	...
Total	...	...	...	...	66,193	3	2

## 11 Revenue Remitted.—Besides the above the following sums were also remitted to the Raj Treasury :—

					Rs.	a.	p.
Cotton Press, Jaipur, Revenue	...	...	...	...	...	...	...
„ „ „ Miscellaneous	...	...	...	...	...	...	...
„ „ Mandaor, Revenue...	...	...	...	...	...	...	...
„ „ „ Miscellaneous	...	...	...	...	...	...	...
Gas Works Revenue...	...	...	...	...	...	...	...
City Water Supply Revenue	...	...	...	...	2,837	0	0
Agra Kothi „ „	...	...	...	...	380	0	0
Ram Newas Garden „	...	...	...	...	1,815	14	10
Dak Bungalows, Rent „	...	...	...	...	788	13	6
Roads, by Sale of Trees, &c.	...	...	...	...	1,185	12	9
Sale of Jaipur Portfolio of Architectural Details	...	...	...	...	377	15	9
Total	...	...	...	...	7,385	8	10

12. Raj Imarat.—This is a separate branch of the P.W.D. of the State, and is chiefly concerned with all works desired by His Highness the Maharaja in the Palace or elsewhere, the sale of Raj land or houses in the City, the Raj quarries, the collection of rent from Raj shops, &c.

Lala Chiman Lal, the Darogha, has superintended this branch with credit to himself and to the satisfaction of the Durbar. He has submitted a report which is printed separately. The following is a brief abstract :—

					Rs.	a.	p.
Expenditure during 1901	...	...	...	...	1,22,079	4	2
No.							
165	Estimates prepared amounting to	...	...	...	1,73,643	0	0
144	Final Bills submitted „	...	...	...	80,280	13	3
476	Sites inspected with reference to cases	...	...	...	...	...	...

The cost of supervision (excluding the cost of establishment from the total expenditure) is Rs.12,883-15-9, which gives a percentage of 7.27 on total expenditure and income.

The final bills submitted by the Daroghā are checked, where possible, by an Assistant Engineer, and are then sent to the Durbar.

Since the Imarut has been under Lala Chiman Lal, the savings which have been made and remitted to the Raj Treasury through the Superintending Engineer are :—

				Rs.	a.	p.
Up to the end of 1900	...	...	...	1,79,054	5	6
During 1901	...	...	...	4,946	14	0
		Total	...	1,84,001	3	6

Lala Chiman Lal has served as Darogha of the Imarut since 1st September 1886, i.e., the last 15 years, and for 15 years before that he worked under Colonel Jacob in the Engineer's office with credit.

13. The Gas Works—are under the superintendence of Mr. Dominy. His report is printed separately and gives details. He has superintended the works satisfactorily.

Comparing 1901 with 1900, the following shows the expenditure, cost of gas, &c. :—

ITEMS.				1900.	1901.
				Rs. a. p.	Rs. a. p.
Gas production	...	...	...	27,071 2 9	28,116 5 0
Miscellaneous	...	...	...	12,409 14 7	11,146 15 0
Revenue	...	...	...	4,112 2 9	4,389 13 3
Average number of jets	...	...	...	No. 756	No. 729
Gas consumed	...	...	...	34,56,040 c. ft.	35,43,400 c. ft.
Cost of gas per 1,000 c. ft.	...	...	...	7 7 2	7 9 6½

The saving of Rs.5,255-7-8 on the Budget grant for the year has been returned for payment into the Raj Treasury.

The office was inspected by Assistant Engineer Lala Rup Chand, on the 19th November, and reported on satisfactorily.

14. State Cotton Press—Jaipur.—The capital outlay up to 31st December 1901 amounts to Rs.2,24,954-6-1.

The following statement shows briefly the capital expenditure, the number of bales pressed, the return and percentage :—

Year.			Expenditure. Capital Account.	Number of bales pressed	Net return.	Annual percentage on outlay.
			Rs. a. p.		Rs. a. p.	
1885	...	...	1,51,994 6 2	423	724 14 7	47
1886	...	...	30,754 2 1	27,623	58,154 15 3	31.76
1887	...	...	13,138 10 0	32,229	63,400 7 8	32.31
1888	...	...	8,221 2 10	19,860	35,114 6 6	17.17
1889	...	...	10,408 3 5	33,384	63,072 14 11	29.86
1890	...	...	2,496 5 2	37,513	68,523 8 4	30.64
1891	...	...	4,317 13 3	31,850	59,904 2 5	31.64
1892	...	...	3,040 5 4	21,193	37,606 4 9	16.76
1893	...	...	456 4 10	13,839	21,492 12 10	9.53
1894	...	...	1,376 5 4	22,181	38,547 1 11	17.15
1895	...	...	—1,489 2 5	23,542	38,558 5 6	17.16
1896	...	...	...	20,760	33,680 10 6	14.98
1897	...	...	...	24,711	40,982 6 2	18.24
1898	...	...	243 14 7	17,055	19,316 9 4	8.59
1899	...	...	—7 14 7	29,350	39,832 13 6	17.71
1900	...	...	3 14 1	15,336	19,185 13 10	8.53
1901	...	...	...	11,311	11,186 15 0	4.97

After paying all expenses the press at Jaipur has earned a clear profit of Rs.4,22,723-2-5 up to date. Lala Jadu Nath, the manager, has submitted a report, which is printed separately. He has the general supervision of this press and also of the one at Mandaor, and has carried out his duties satisfactorily.

The machinery of the presses is under Mr. Dominy, Engineer of the Water-Works and Superintendent of the Gas Works.

15. **State Cotton Press—Mandaor.**—The number of bales pressed was 7,626. After meeting the working expenses there has been a net profit of Rs.4,700-2-9, which gives a percentage of 4.11 on the capital outlay on this press, Rs.1,14,306-14-10.

16. **City Conservancy.**—The portable railway line, length 15,350', with 4 depôts and 209 wagons of sorts, have all been maintained in good order.

The following work has been done: 81,204 wagon loads of foul earth and sweepings removed from the city, equivalent to 649,632 c.ft.; 5,122 dead animals taken away; 16,829 cartloads of refuse, leaves, grass, &c., brought by the municipal carts have been burnt in the furnaces at the depôts to save the cost of removal.

Fresh and clean sand has been brought in as required for the urinals, latrines and tigers cages.

70 sheet iron bodies of the tilting wagons have been renewed.

17. **Ice.**—The total quantity despatched from Agra and Lucknow during 1901 was 899 maunds 26 seers.

The average wastage in transit was 20 maunds 28 seers per cent., the maximum being 23 maunds per cent. in August; the minimum 16 maunds 19 seers per cent. in November.

The average wastage per cent at the Ice Dépôt, Jaipur, was 10 maunds 5½ seers.

The total amount sold or disposed of was 703 maunds 14½ seers. The total expenditure was Rs.2,624, the amount realised Rs.2,847-6-6. The selling price at Jaipur was 0-1-6 per seer.

18. **Lime.**—11,172 maunds of stone lime have been made at a cost of Rs.5,269, giving an average rate of 2 maunds 4 seers 12 chittaks per rupee. Last year the rate was 2 maunds 7½ seer per rupee, the reason being that the price of limestone was formerly Rs.9-4-0 per 100 maunds, now it is Rs.11.

19. **Stone-cutters' Yard.**—The following are some of the works which have been carried out during 1901 :—

Marble canopy for Hon. W. E. Cooper at Cawnpore.

„ tabernacle for the altar of R. C. Church, Neemuch.

24 tombstones modelled and estimated; 13 carried out, 11 in hand.

A quantity of cutstone work has also been carried out for 12 irrigation works in the district.

2 marble altars made for churches in Delhi, one in hand.

2 „ fonts in hand for churches at Mussoorie and Karnal.

1 „ lectern in hand for church in Dehli

1 „ table for hospital at Karnal.

2 brass memorial wall tablets for Ajmer and Rewari; the latter in hand.

20. **Workshops.**—During the year 546 orders entered in the Order Book. The total expenditure was Rs.10,104-1-9. The following are some of the chief items of work done :—

Church furniture for Patiala in shisham wood.

Altar.—Altar rail with brass standards.  
Lectern, prayer-desk with seat and vestry chair.  
Boat (17' x 5') for Bikanir; copper sheet on teak frame.  
Brass door for tabernacle for altar at Neemuch.  
„ candlesticks for altar for Delhi.  
Camel trunks.  
6 corrugated sheet-iron cylinders for deepening wells.  
Wooden gates and overhead gear for raising sluices.  
Repairs to the portable railway plant, rails, wagons, axle-boxes, &c., and many other items too numerous to mention.

21. **Ram Newas—Expenditure.**—The total on garden maintenance for the year was Rs.17,472-4-7 or Rs.1,159-9-10 more than in the year 1900.

The following is a comparative statement for the two years 1900 and 1901.

ITEMS.				1900.			1901.		
				Rs.	a.	p.	Rs.	a.	p.
Permanent Establishment	...	...	...	5,427	14	6	5,175	9	6
Watering	...	...	...	8,471	11	4	8,634	14	7
Miscellaneous	...	...	...	2,410	0	11	3,661	12	6
		Total	...	16,312	10	9	17,472	4	7

There is a saving of Rs.252-5-0 on permanent establishment, an excess of Rs.160-3-3 on watering owing to deficiency of rain, and Rs.1,251-11-7 on miscellaneous on account of purchase of new lawn mowers, &c.

*Construction.*—The amount spent on works of construction and repairs was Rs.4,017-4-6; the items are shewn in detail in the report submitted by the overseer, and comprise over 75 items.

*Receipts.*—The amount realized by sale of garden produce is Rs.1,721-3-9 or Rs 160-7-4 less than in 1900. The following is a comparative statement for 1900 and 1901 :—

PARTICULARS.				1900.	1901.
				Rs. a. p.	Rs. a. p.
Sale of vegetables, dallis	...	...	...	277 12 4	350 3 0
" " "	...	...	...	58 3 6	11 6 0
" plants and shrubs	...	...	...	120 10 6	68 5 0
" rose plants	...	...	...	20 12 0	4 0 0
" seeds	...	...	...	119 5 6	106 13 6
Cut flowers	...	...	...	149 7 0	117 5 6
Fruits	...	...	...	74 14 6	127 8 0
Bouquets	...	...	...	31 10 0	34 4 3
Sundries	...	...	...	88 14 9	34 13 0
Old pani grass	...	...	...	27 13 9	1 9 6
Birds and animals	...	...	...	78 0 3	69 13 0
Tools and implements	...	...	...	276 4 0	241 5 0
Dry wood	...	...	...	167 0 0	40 13 0
Green grass	...	...	...	343 0 0	440 0 0
Flower Show Tickets	...	...	...	40 0 0	54 1 0
Cuttings of plants	...	...	...	1 11 0	...
Fruit trees	...	...	...	2 4 0	6 12 0
Price lists and catalogues	...	...	...	4 0 0	2 0 0
Lac	...	...	...	...	10 0 0
Fines	...	...	...	...	0 4 0
Total	...	...	...	1,881 11 1	1,721 3 9

247 plants, shrubs, roses, &c., to the value of Rs.55-6-0, have been issued free to the Residency, the Superintending Engineer, the Church, the Cemetery and Polo Club. If this be added to the above, the total receipts will be Rs.1,776-9-9.

*Issues.*—The following were issued during 1901 :—

	No.
Dallis or baskets of vegetables ... ..	2,492
Bouquets ... ..	1,526
Baskets of cut flowers ... ..	431
Rose plants ... ..	14
Plants and shrubs ... ..	408
Fruit trees ... ..	29
Packets of seeds, flower, 111 } ... ..	370
"    "    vegetables, 259 }	

*Plants and seeds* were received as under :—

The Superintendent Sujjan Newas Garden, Udaipur—

24 roots of canna, 3 varieties.

Native gardeners, Jaipur—

1,000 rose Edward.

The Superintendent, State Gardens, Baroda—

19 plants (palms) 17 varieties.

Ernst Benary of Erfurt—

74 packets of vegetable seed.

217 " flower "

6 " palm "

26 " tree "

5 " Dutch bulbs.

Messrs. Thomas Methuen & Sons, Edinburgh—

1 packet *Tropaeolum Speciosum*.

Government Botanical Gardens, Saharunpur—

56 packets seeds of trees and shrubs.

Government Horticultural Gardens, Lucknow—

6 plants *Solanum Macranthum*.

Messrs. Damman & Co., Naples—

22 packets of flowering annuals seeds.

22 " vegetable "

*Acclimatised seeds* were collected from the garden as under :—

Flowering annuals seeds ... ..	108 varieties.
Tree and shrub " ... ..	12 "
Vegetable " ... ..	20 "

A list showing the names and quantity of seed is given in the Overseer's report.

The following have been sown in the gardens—

	Rs.	a.	p.
69 varieties of flower seeds, value... ..	32	14	0
17 " trees and shrubs " ... ..	22	3	0
18 " vegetable " " ... ..	30	11	0

*Vegetables.*—The seeds from Ernst Benary germinated well, excepting parsnip (2 sorts), salsify, celeriac, lavender, rosemary, rue, sage, summer savory and winter savory. The seeds from Messrs. Damman & Co., of Naples, 22 varieties, all germinated, except turnip, and were excellent.

*Flowers.*—The seeds received from Ernst Benary did well, with the exception of 22 varieties, which the Overseer notices in his report. 22 varieties were received from Messrs. Damman & Co., of Naples, on 20th October, and were sown on the 29th October; all germinated freely except "*mimulus moschatus*."



*Plants.*—20 varieties of shrubs, creepers, trees and palms were raised from seed obtained from Mr. Benary.

*Rose Garden.*—A plot of ground about 150' × 40' west of the Albert Hall has been cleared and planted with Rose Edward, also a portion south-west of the Aviary, to which water from the Aviary tanks is passed off whenever the tanks are cleaned.

*Flower Show.*—The 21st year of the annual Flower Show took place on the 8th March 1901. 218 prizes, amounting to Rs. 250-8-0, were awarded, and 38 exhibits were commended.

				Prizes.	Amount.		
					Rs.	a.	p.
For flowers ...	...	...	...	115	137	0	0
„ fruits ...	...	...	...	33	34	8	0
„ vegetables ...	...	...	...	70	79	0	0

The above amount was distributed among 36 malis. Each prize-winner was required to sign a paper certifying that he has himself raised the exhibit for which the prize is awarded, to prevent any one unfairly winning a prize. 865 admission tickets were sold to the public, realizing Rs. 54-1-0—at one anna each. The next day there is no charge made for admission.

*Apprentice boys.*—Sons of malis are taught reading and writing in the vernacular and simple arithmetic for 2 hours daily;—the rest of the day they work in the garden, and are examined every 3 months by the Overseer. 22 are under training.

*Zoological Section.* All the birds and animals have been well cared for. The numbers on the list for 1901 were—

				Rs.
Balance on 1st January 1901	...	...	...	1,656
Received during 1901—				
Brought by raj shikaris	...	...	220	}
„ from „ shikarkhana	...	...	4	
„ „ „ Shekhawatti	...	...	1	
Purchased ...	...	...	784	}
Increased in the garden...	...	...	303	
				1,312
Total				2,968
Struck off—died or sold				1,113
Balance on the 31st December				1,855

The details of birds received and the items and quantities of food given is shown in the report submitted by the Overseer.

The total expenditure on this section during 1901 was Rs. 11,552-8-2, including establishment, food and all other expenses.

The account and office were inspected once a month or so by one of the Assistant Engineers.

22. *Surveys.*—The following were carried out during 1901:—

Under Assistant Engineer Lala Rup Chand—Lakawas Bund, Nego Bund, Binori Sagur, Gangapore and Lalsot Road, Gangapore and Bharoti Road, Mora Sagur, Gaitolao, Rawatwala Tank, Buswa project, Kothun and Lalsot Road.

Under Assistant Engineer Lala Indra Sahai—Raising Bhambolao, Kachnaria Nullah for canal crossing, Gagra Nullah for canal crossing, Newal Sagur, Kurwa-ka-Bas, Dhamalia Tank, Hingonia and Govindi canal, Chaparwara supply canal, Pachala duct, Kalegh Sagur canal, Agur Sagur, Dantoli, and contours of 34 tanks to secure record of contents at every foot in depth, Tori Sagur Nullah No. 1, Rupahaili Tank, raising Garera H. W. L. 2 ft., Dungri, Malpura to Rajmahal Road (in progress).

23. Journals.—The distances travelled by the engineer officers during 1901 on duty were—

	Road.	Rail.	Total miles.
Colonel Jacob ... ..	650	157	807
Mr. C. E. Stotherd (4 months only) ...	678	...	678
Lieut. A. ff. Garrett, R. E. ...	875	674	1,549
Lala Rup Chand... ..	1,730	669	2,399
Babu Mukerji ... ..	1,077	139	1,216
Lala Indra Sahai ... ..	2,304	472	2,776
Overseer Kotu Mall ... ..	2,651	358	3,009

24. Personal.—Colonel S. S. Jacob was in charge during 1901. Mr. C. E. Stotherd was on well-earned leave from 30th March until 21st November 1901.

The services of Lieutenant A. ff. Garrett, R.E., were again lent by the Government of India to the Jaipur State from 28th April 1901.

Colonel Jacob is glad to place on record his appreciation of the excellent service rendered to the State by these two officers. Mr. Stotherd in the Railway Branch especially, of which he has had sole charge from the beginning, as well as in every other branch of the Public Works of the State, in all of which he has ably and cheerfully superintended or given help.

Lieutenant Garrett has helped in many ways, especially in the restoration of the Observatory of Maharaja Sewai Jai Singh, which has been lately sanctioned by His Highness Maharaja Sewai Madho Singh. Lieutenant Garrett's professional attainments have proved of great use, and the way in which he has worked with the native astronomers has insured success.

The Assistant Engineers Lala Rup Chand, Babu K. N. Mukerji and Lala Indra Sahai have proved themselves useful and efficient officers.

The reports submitted by each officer show in detail the works in their charge and are satisfactory.

Owing to the death of Babu Sookh Lall, the Overseer in the S. W. districts, this division has been put in charge now of Lala Indra Sahai, Assistant Engineer. There are 90 tanks scattered over an area of about 2,700 square miles, 7 main canals aggregating 298 miles in length, with many miles of smaller distributaries.

It is with regret the death of Babu Sookh Lall, Overseer of the Western District, is recorded. He died 3rd October 1901, and although latterly, owing to failing health and energy, work was often delayed, still the good work he had done in his day must not be forgotten. He came fresh from Roorkee here in 1868, and has served in this district for over 30 years. Some of the largest and best of the irrigation works, such as Kalegh Sagur, Tori Sagur, Chaparwara Sagur and many others, were carried out under his superintendence. His character for integrity also stands high. Colonel Jacob is glad to have the opportunity of placing on record this tribute to his memory.

Owing to increasing infirmity B. Asgar Ali, Sub-Overseer, Tonk Road, has been replaced by Sub-Overseer Gokal Chand.

25. Designs were submitted from this office, in addition to the ordinary work, for the undermentioned, *viz.*, Chief Court at Burma (gaining half the second prize), new offices for the Civil Secretariat at Simla (accepted by the Government of India), for an obelisk as a memorial on the Frontier, small memorial Hospital at Mount Abu, General Post Office at Lahore, Runic cross memorial for Delhi, Dais and amphitheatre for Coronation assemblage, Delhi.

26. Rainfall and Ratio of run off.—At the following places the rainfall recorded has been as follows :—

Place.			Rainfall in inches.	Ratio of run off.		
Boochara	...	...	6	42 per cent. or 2·5 inches.		
Ramgarh	...	...	8·78	5·1	„	0·4 „
Sainthal	...	...	...	12·3	„	1·6 „
Chaparwara	...	...	6·83	...	...	
Phagi	...	...	4·67	...	...	
(1) Kalegh	...	...	3 78	1·75	...	
(2) Tori	...	...	14 30	4·75		

The above shows how precarious the ratio of rainfall and run off is in this country, depending so much on soil, nature and duration of rainfall.

The rainfall at Nim ka Thana has been 12 inches. The run off calculated on this gives a percentage of 21 for Boochara.

27. The Irrigation Commission—Visited Jaipur 17th—20th November. President: Sir Collin Scott-Moncrieff, K.C.M.G., C.S.I., R.E.; Members: T. Higham, Esq., C.I.E.; the Hon'ble Mr. D. C. J. Ibbetson, C.S.I.; Diwan Bahadur Rajaratna Mudaliyar; Secretary: W. B. Gordon, Esq. Meetings were held in the Albert Hall on the 18th and 19th November. Representatives of the following States were examined: Jaipur, Ulwar, Bharatpur, Dholepur and Tonk.

The proceedings will no doubt be duly recorded by the Commission.

28. Raj Observatory.—The famous observatory, which was founded here by Maharaja Sewai Jai Singh, consisting of masonry edifices on a large scale for recording astronomical observations, for many years has been in disrepair. His Highness the present Maharaja Sewai Madho Singh has sanctioned all these instruments being repaired. The work has been well carried out by Lieutenant A. ff. Garrett, R.E., assisted by the native astronomers. Lieutenant Garrett has personally checked all the calculations, and the result reflects credit on all concerned.

$$\begin{aligned}
 & \text{sq. m.} & \text{ft.} & \text{ft.} & \text{rainfall.} \\
 (1) \text{ Kalegh.—Total rainfall} & = \frac{227}{12} \times 5,280 \times 5,280 \times 3\cdot78 \\
 & \text{filled } 9\frac{1}{2} \text{ ft.} \\
 & = \frac{1,993,444,992}{35,000,000} \text{ c.ft.} \dots\dots\dots (a) \\
 & \text{Contents at a depth of } 9\frac{1}{2} = 35,000,000 \text{ c.ft.} \\
 & \text{Percentage} = \frac{35,000,000 \times 100}{(a)} = 1\cdot75. \\
 & \text{Very little rain fell—mostly absorbed in the dry sandy drainage area.} \\
 (2) \text{ Tori Sagur—had 15 ft. water unused from last year—filled up to 22 ft.} \\
 & \text{Quantity of water between 22 and 15 ft.} = 552,000,000 \text{ c.ft.} \dots\dots\dots (a) \\
 & \text{sq. m.} & \text{ft.} & \text{ft.} & \text{rainfall.} \\
 & \text{Total rainfall} = \frac{350 \times 5,280 \times 5,280 \times 14\cdot30}{12} = 11,627,616,000 \text{ c.ft.} \dots\dots (b) \\
 & \text{Percentage} = \frac{a \times 100}{b} = 4\cdot75.
 \end{aligned}$$

29. Jaipur-Sewai Madhopur Railway.—*General Remarks.*—This work is in charge of Mr. Stotherd, who reports as follows :—

The following works, which remained incomplete at the end of 1900, have been carried out :—

*Earthwork.*—Capital III.—Plantations were maintained in all station-yards. Earthwork repairs to banks were completed throughout the whole 73 miles.

Sidings were completed at the locomotive yard, Jaipur, and in Burwara and Sewai Madhopur station, yards.

Protecting spurs were completed near mile 34 to divert cross drainage from the vicinity of the railway embankment.

*Bridgework.*—Capital IV.—The Banas Bridge, 30 spans of 60 feet.—The remaining masonry work on this bridge was completed before the rains. Ashlar and bed stones are being erected, and the work is practically finished and is ready for the erection of the girders.

When entirely finished this bridge will be of the utmost utility in providing communication across the Banas river, which is nowhere bridged in the State, and forms an obstacle to traffic. It varies from  $\frac{1}{2}$  mile to over 1 mile in width, fordable only at certain points in the dry season, and impassable in the rains except between the heavy floods, and then only in large flat bottomed boats at 3 or 4 places only.

Arched bridges, 5 spans of 18 feet arches and 12 spans of 15 feet arches, were completed before the rains at mile 41. All the major and minor bridges, numbering seventy in all, have now been finished throughout the entire railway, and only the erection of girders remains to be done.

*Road crossings*—Capital V—have been consolidated with kunkur throughout the line.

*Ballast collection*—Capital VII (1)—had already been completed last year.

*Permanent-way*—Capital VII (2)—Nothing can be done until funds are allotted by the Durbar as noted in the last annual report.

*Station Buildings.*—Capital VIII.—The station building at Sewai Madhopur is nearly finished. The remaining station buildings are finished.

All station and goods platforms have been consolidated with kunkur.

A store shed has been completed at Jagatpura station, to serve as a store depôt for the laying of permanent-way.

A running room for the native staff, consisting of a dormitory and two dining rooms, with a separate cook room to each for Hindus and Mahomedans, has been built at Sewai Madhopur.

A sub-inspector's quarter has been completed at Sewai Madhopur with four out-houses.

A well for locomotive purposes 20 ft. diameter has been sunk at Sewai Madhopur.

Two engine-sheds with repairing shops are nearly completed at Jaipur and Sewai Madhopur respectively. Accommodation is provided for four engines at each place.

Thus with the small amount of work still required to be done to complete the engine-sheds and the Sewai Madhopur station, nothing more can now be done until the Durbar allots the funds required for the purchase of the permanent-way, girders, &c.

As soon therefore as the above mentioned works are finished, the work will be closed pending the allotment of the necessary funds.

*Testimony to the Officer in charge.*—The whole work from start to finish has been entirely under Mr. Stotherd assisted by one Assistant Engineer, Babu Kaloda Nandan Mukerji, and a small staff. Mr. Stotherd desires again to place on record the excellent services rendered by this officer. The whole of his work has been carried out in an entirely satisfactory manner with economy and efficiency.

*Testimony to the Engineering staff.*—The following is a list of the sub-overseers employed on the railway during the year: Babus Abdul Rahim and Chandi Pershad, Gokul Chand, Harsaran Das and Murad Ali.

The first three have now been transferred to ordinary P. W. of the State, while B. Murad Ali has come under reduction. B. Harsaran Das remains to complete the remaining works. All have worked well.

**Testimony to the clerical staff.—Head office—**

B. Ajodhya Pershad.  
B. Chhoga Lal.  
P. Sukhdeo Pershad.  
B. Gahra Lal, Draftsman.  
B. Jewan Baksb, Store-keeper.  
Seth Kanhaya Lal, Treasurer.  
L. Mohri Lal, Sub-treasurer.

**Assistant Engineer's Office.**

B. Bijay Lal, Head clerk.  
B. Kedar Nath, Assistant clerk.  
L. Maya Chand, Sub-treasurer.

The whole staff has worked well and given satisfaction. Babus Ajodhya Pershad, Chhoga Lal and Bijay Lal deserve special mention.

The Assistant Engineer's staff was withdrawn from the Banas River in August, and the dispensary there closed on completion of the masonry work.

Babus Sukhdeo Pershad and Kedar Nath came under reduction in August and October respectively.

*Work in the Office—*

		English.	Vernacular.
Letters and papers received...	...	1,124	122
" " despatched	...	1,113	169
Muster rolls checked	...	1,015	
Contract and other bills	...	840	

**Expenditure.**—The annexed statement shows the total expenditure incurred up to 31st December 1901, and also the expenditure during the past year:—

HEADS OF ACCOUNT.	Credit.		Debit.	
	C. Rs.	J. Rs.	C. Rs.	J. Rs.
To Raj Account	20,000 0 0	8,23,403 0 0	...	1,786 10 0
„ Capital XX—Miscellaneous Advances Account	...	...	...	3,586 7 6
„ Capital XVII—Stock Account,	...	...	4,988 11 0	525 13 2
„ Unclaimed Wages Account...	...	152 2 10	...	...
„ Exchange Account	12,656 12 0	12,505 7 0	12,523 3 0	12,637 0 0
„ Fine Account	...	55 5 0	...	...
„ Security Deposit Account	...	1,000 0 0	...	...
By Capital I (1)—Survey	...	...	...	1,379 13 11
„ „ I (2)—Plant	...	...	...	301 0 5
„ „ I (3)—Establishment,	...	...	...	1,532 7 8
„ „ III (1)—Earthwork	...	...	236 14 4	1,76,671 1 8
„ „ IV (1)—Large Bridges,	...	...	4 0 4	1,06,650 9 6
„ „ IV (1)—Banas	...	...	5,993 4 4	1,26,764 4 0
„ „ IV (2)—Minor Bridges,	...	...	25 4 0	58,300 7 0
„ „ V (1)—Fencing	...	...	...	1,217 9 2
„ „ V (2)—Road Crossing	...	...	...	4,740 10 0
„ „ V (3)—Mile and gradient posts	...	...	...	106 8 9
„ „ VII (1)—Ballast	...	...	...	1,18,023 11 4
„ „ VII (2)—Permanent-way	...	...	...	7 11 0
„ „ VIII (1)—Stations and Offices	...	...	1,833 7 7	40,488 0 5
„ „ VIII (2)—Workshops and Store Buildings...	...	...	...	2,766 15 3
„ „ VIII (3)—Staff Quarters,	...	...	1,130 15 4	79,931 4 5

HEADS OF ACCOUNT.	Credit.		Debit.	
	C. Rs.	J. Rs.	C. Rs.	J. Rs.
By Capital VIII (4)—Station Machinery...	...	...	127 13 6	27,648 5 0
" " VIII (1)—Isarda ...	...	...	110 3 0	7,729 10. 4
" " VIII (3)—" ...	...	...	0 12 0	5,068 3 5
" " VIII (4)—" ...	...	...	...	1,831 15 3
" " IX (1)—Plant ...	...	...	707 6 3	4,098 11 1
" " IX (4)—Station & Office Furniture ...	...	...	322 7 0	402 11 1
" " XII (1)—Direction ...	...	...	105 0 6	9,390 5 1
" " XII (2)—Engineering ...	...	...	3,498 8 6	37,408 7 10
" " XII (3)—Stores ...	...	...	3 12 0	1,248 1 6
" " XII (4)—Audit & Account ...	...	...	...	2,007 1 0
" " XII (5)—Medical and Sanitation ...	...	...	398 5 11	1,275 12 3
Total Rs. ...	...	...	32,010 0 7	8,35,527 5 0
Balance in hand on 31st December 1901 ...	...	...	646 11 5	1,588 9 10
GRAND TOTAL Rs. ...	32,656 12 0	8,37,115 14 10	32,656 12 0	8,37,115 14 10

The total expenditure up to 31st December 1900, including Suspense Accounts, was C. Rs.30,702-14-5 and J. Rs.7,29,711-8-2, and during 1901 C. Rs.1,307-2-2 and J. Rs.1,05,815-12-10.

**Concluding Remarks.**—It is hoped that the necessary funds may soon be forthcoming to complete this work.

**30. Overseers and Sub-Overseers.**—Munshi Nathu Lal has charge of the roads and many of the buildings in the City and environs; also the superintendence of the Ram Newas Gardens and distribution of the water in the City, the work in the stone-cutters' yard, &c., and occasional surveying. He has proved himself an attentive, hardworking, useful overseer and has given satisfaction.

*Overseers.*

B. Kotu Mull.  
B. Mohomud Hoosain.

*Sub-Overseers.*

B. Poorun Lal  
B. Chandu Lal.  
E. Nathu Lal.  
B. Dina Nath.  
B. Ganga Pershad.  
B. Chandi Pershad.  
B. Gulzari Lal.

*Sub-Surveyor.*

B. Bansi Dhur.

*English.*

L. Indur Lal.  
Pt. Bala Baksh.  
B. Ajodhya Pershad.  
L. Chotey Lal.  
L. Johri Lal.  
L. Jai Ram.  
L. Madan Mohan Lal.  
Pt. Sri Dutt.  
L. Nathu Lal.  
B. Het Ram.

The Overseers and Sub-Overseers noted in the margin work under the Assistant Engineers, who report well of them.

**31. Office Establishment.**—Lala Shiam Soondur, the Head Clerk and Accountant, has proved a hardworking and efficient man.

The other clerks mentioned in the margin have behaved well, but more is expected of them to keep work up to date in compliance with standing orders.

*Persian.*

L. Anundi Lal, head serashtadar.  
 L. Ram Saroop  
 L. Jamna Pershad.  
 Pt. Ram Pertab.  
 M. Sa-adut Khan.  
 Pt. Jai Narain.  
 Pt. Ram Narain, storekeeper. ...  
 L. Chandu Lal sub-storekeeper.  
 L. Bansi Bullabh, sub-storekeeper ...  
 B. Shunkar Lal, head draftsman. ...  
 B. Lal Chand, draftsman.  
 Pt. Sheo Narain, do.  
 Seth Kanahya Lal, treasurer. ...  
 L. Mohri Lal, sub-treasurer.  
 L. Misri Lal, do.

## II.—BUILDINGS.

32. The statement marked B shows new and other works which have been carried out during 1901 and the expenditure on each. The reports submitted by the subordinates give full details.

The chief works were—

*At Jaipur*—New barrack for prisoners at the Chandpol jail 98' x 26'.

*Mayo Hospital*.—Marble floor instead of chunam in the surgical ward (in progress).

5 rooms, each 12' x 9' in the courtyard, east of the female ward.

150 bedside almirahs provided, of shisham wood with movable zinc sheet trays on the top and cupboard in lower portion.

*Superintending-Engineer's out-houses*, which were burnt down, have been renewed and covered with terraced roofs on expanded metal as an experiment, also a new dressing-room and bath-room have been provided upstairs.

*At the Residency*—A court for squash racquets has been built.

33. *Shekhawati*.—Four new thanas were constructed at Jhunjhnu, Sultana, Singhana and Narhar.

Each thana consists of a central office with male and female hawalats, and quarters for the Thanadar and Munshi, with a verandah in front and steps to the roof.

34. Additions or repairs have been carried out in the following buildings :—

Dispensaries at *Mhowa, Gangapur, Hindaun, Chaksu*.

At *Lalsote* a masonry compound wall 459 ft. long built.

*Nim ka Thana*.—A Contagious ward costing Rs. 202 erected.

*Jhunjhnu*.—Compound wall and wind vane repaired.

*Sri Madhopur*.—Whitewashing.

*Malpura*—Whitewashed and kutcha outhouse erected.

*Thanas*.—At *Mhowa, Wazirpur, Bhurki* in *Shekhawati*.

Cotton press.—At *Mandaor*.

Rest houses.—At *Mandaor, Mhowa, Hindaun, Lalsote, Dehmi, Dudu* and *Nirana*.

Post Office.—*Mhowa*.

*Rahdari*.—At *Jatwara*.

## III.—ROADS.

35. There are 300.92 miles of metalled road and 224.13 miles unmetalled in this State.

Appendix C shows in abstract form the expenditure on each road and the average cost of maintenance per mile during 1901.

36. The Roads in the City and Environs.—Aggregate 47·31 miles : 39,024 c. ft. kunkur has been collected and the following work has been done :—

<i>Johri Bazar</i> .—Kunkur collected,	32,227 c. ft.
„ consolidated,	2,400 ft. $\times$ 33½ ft.
<i>Ajmere Bazar</i> .—Kunkur collected,	51,375 c. ft.
„ consolidated,	2,170 ft. $\times$ 53½ ft.
<i>Ajmere direction</i> .—Mile 2½ to 3½. Kunkur collected,	25,671 c. ft.
„ consolidated,	5,570 ft. $\times$ 12 ft.
<i>Dhudda ka Rasta</i> .—Kunkur collected,	552 c. ft.
„ consolidated,	109 ft. $\times$ 12 ft.
<i>Huddyan ka Rasta</i> .—Kunkur collected,	4,502 c. ft.
„ consolidated,	615 ft. $\times$ 20 ft.
<i>Gopi Nathji ka Rasta</i> .—Kunkur collected,	3,689 c. ft.
„ consolidated,	785 ft. $\times$ 12 ft.
<i>Agra Road</i> —1st mile, Kunkur collected,	26,607 c. ft.
„ consolidated,	5,810 ft. $\times$ 12 ft.

37. Naila Branch of Agra Road. 5 miles.—Mile 10 to 10½ has been re-metalled, and 33,219 s. ft. of ordinary repair done.

38. Agra Road, 76·16 miles.—The portion 0—4 is included in the City Roads. The parapet wall in mile 5 has been raised 2 ft. for a length of 850 ft. to keep off the sand.

In the section miles 4—55 the following work has been done :—

Ordinary repairs	...	...	...	225,074 s. ft.
Earthwork	...	...	...	225,983 c. ft.

165 guard stones put to bridges.

Kunkur has been collected for fresh layer—

Mile 4½—5 (by transport carts)	...	...	10,500 c. ft.
„ 24 by contractor	...	...	4,634 c. ft.
„ 25	...	...	3,319 „
„ 33—35½	...	...	10,090 „
„ 45½—46	...	...	10,202 „
„ 49½—50	...	...	10,664 „
„ 52½—53	...	...	10,532 „
Total	...	...	60,171 „

Kunkur collected for repair of cart track—mile 39 ... 11,679 c. ft.

Kunkur collected for ordinary repairs in other miles ... 25,456 „

The following miles have been re-metalled :—Mile 24, last ½ of mile 25, the second half of miles 50 and 53.

The following work has also been done :—

<i>Kanawala causeway</i> .—Kunkur collected	...	...	4,268 c. ft.
Kunkur consolidated in 2 layer	...	...	5,090 s. ft.
„ „ 3 „	...	...	5,003 „
Sand removed	...	...	42,280 c. ft.

The road crossings have been renewed as under—

Mile 13, 100' $\times$ 2' $\times$ 4'	
„ 14, 50' $\times$ 2' $\times$ 4'	
„ 16, 40' $\times$ 2' $\times$ 4'	

In mile 16 the following has been done at the ramp—

Kunkur collected,	2,380 c. ft.
„ consolidated in 2 layers,	1,101 c. ft.
Earthwork	43,508 c. ft.



*Income*—Has been derived as under—

					Rs.	a.	p.
Sale of dry wood	...	...	...	...	24	0	0
„ patras	...	...	...	...	20	8	0
„ grass and pala	...	...	...	...	9	0	0
Rent from Dosa rest-house	...	...	...	...	12	12	6
Total					66	4	6

In the second section of this road, miles 56—76, the following work has been done—

Ordinary repairs	..	...	...	...	61,075	s. ft.
Earthwork	...	...	...	...	37,036	c. ft.
Kunkur collected for repairs	...	...	...	...	5,244	„
„ consolidated miles 56—56½.						

The patris have been cleared and repaired.

*Income* has been realised as under—

					Rs.	a.	p.
Sale of dry trees	...	...	...	...	37	10	6
„ „ pala	...	...	...	...	1	8	0
Total					39	2	6

39. Ajmer Road, 52 miles.—Total expenditure during the year has been Rs. 5,370-14-9, which gives an average of Rs. 111-14-3 per mile.

Kunkur has been collected in miles 8, 18, 20 and 23 in full and in 41 in part. Total collected 66,387 c.ft. Material for dressing collected in mile 41—1,168 c.ft. No consolidation has been done this year for want of water, except the third layer of mile 20 and general repairs of cart track.

			s. ft.	Rs.	a.	p.
Third layer consolidation	...	...	54,935	309	0	0
General repairs	...	...	91,479	440	6	0
Total			146,414	749	6	0

Earthwork 86,632 c. ft. for Rs. 163-3-0 has been done in miles 7 and 37 and wherever necessary. Other works in connection with this road have been—

				Rs.	a.	p.
Dehmi rest-house, petty works...	...	...	...	20	2	6
Dudu	...	...	...	8	15	0
Nirana repairs, whitewashing and thatching	...	...	...	261	1	0
Total				290	2	6

The income from the road has been as under—

					Rs.	a.	p.
Lac	...	...	...	...	27	0	0
Dry trees	...	...	...	...	123	0	0
Khajur leaves	...	...	...	...	3	0	0
Babul „	...	...	...	...	13	0	0
Total					166	0	0

40. **Nirana-Malpur Road, 38·63 miles.**—The earthwork was completed in 1900 as a relief work. Some causeways have been metalled this year. Kunkur has been collected but no consolidation could be done this year for want of water. Rupees 673-15-6 have been spent, which gives an average of Rs.17-7-1 per mile.

				Rs.	a.	p.
On earthwork	...	...	... 38,812 c. ft.	124	6	6
Establishment		...	...	200	7	3
Other repairs	...	...	...	349	1	9
Total				673	15	6

41. **Jaipur-Tonk Road—47·61 miles.**—Section I—0 to 15 miles, 19,786 c.ft. kunkur has been collected. Kunkur was also collected in miles 17, 18, 20, 21, 23, 24, 25, 26, 32, 37, 38 39 and 42; and consolidation done in miles 17, 18, 24, 25, 36 38 and 47; in the halves of miles 21, 22, 24, 29, 32, 38 and 43.

The usual rain repairs and making up of patris was carried out.

				Rs.	a.	p.
The income from the Road was for babul patras	...		...	54	3	0
Dry trees	...	...	...	56	9	9
Total				110	12	9

In addition to the whole of the railway works Bahu Mukerji had charge of the Banas-Chambal fair weather road and a few petty works in the Sewai Madhopur district throughout the year.

On the completion of the Banas Bridge, the central districts of the State were also made over to his charge in September.

In addition to the work alluded to above on the Jaipur-Tonk Road, the following may be noted:—

*Banas to Chambal River fair weather road.*—New khurrahs were consolidated, miles 58 to 71, and the usual earthwork repairs and clearing were carried out.

42. **Link Road to Chatsu Station.**—About half of this road has been completed and kunkur is collected in the remaining portion.

43. **Kuthun-Lalsote fair weather Road.**—Kunkur consolidation has been done in the khurrahs at the Moril river, Ugriawas and Lakampur.

44. **Dosa and Sewai Madhopur Road, 82½ miles.**—In the first section, miles 1—24 cart-tracks have been remetalled in half miles 2 and 21 each 6 ft. wide. The nullah approaches in mile 19 (500 ft. x 10 ft.) repaired; kunkur has been collected 5,265 c.ft. for repairs.

In the second section, miles 25 to 52, earthwork done 86,928 c. ft. and the road newly done from mile 27¾ to 28¾ on higher ground.

A road dam at mile 40 has been repaired with masonry and a drystone floor.

The income was as follows—

				Rs.	a.	p.
By sale of dry trees	...	...	...	31	9	0
Patras	...	...	...	24	8	0
Pala grass	...	...	...	2	0	0
Unripe mangoes	...	...	...	6	0	0
Total				64	1	0

45. Lalsote-Gungapore fair weather road, 26 miles.—Has been repaired where necessary; 50,445 c. ft. earthwork done and patris cleared.

46. Gangapore-Malarna fair weather road, 27 miles.—Earthwork done 98,254 c.ft., and patris cleared.

47. Buswa.—The roadway of the Delhi Gate and Jabajrampur Gate has been repaired, 4,908 c.ft., drystone pitching and 11,715, c. ft. earthwork.

48. Mandaor and Kerauli Road, 43 miles.—The following work has been done—

Ordinary repairs	...	...	...	...	253,444 s.ft.
Earthwork	...	...	...	...	121,446 c.ft.

Kunkur has been consolidated half mile, 31½ to 32; full miles 30 and 32

Kunkur was collected for ordinary repairs 30,010 c.ft. and for 3rd layer 50,151 c.ft. in the following miles; 13, 22, 30, 31, 33, and 35.

Stone broken to 1" gauge was also collected for mile 13—1,945 c.ft.

The earthwork repairs were done where necessary and patris cleared.

The red-stone slab causeway across the Gumber was taken up before the rains and was reset after the rains. The similar causeway in the Bangunga near Mhowa is arranged for by a contractor.

The income derived from the road—

					Rs. a. p.
By the sale of trees	...	...	...	...	131 9 8
Grass and pala	...	...	...	...	43 8 0
Babul seed	...	...	...	...	9 8 0
By the rent for use of the causeway in R. Bangunga	...			...	50 0 0
By annual rent ground Mandaor chowki	...		...	...	1 4 0
By the rent of bungalows	...	...	...	...	79 0 0
Total	...			...	314 13 8

49. Hindaun-Gungapore fair weather road, 24 miles.—This road has been cleared and repaired where necessary: 189,100 c.ft. earthwork has been done.

					Rs. a. p.
The income derived by sale of wood	...		...	...	16 0 0
Sale of grass	...	...	...	...	2 8 0
Total	...			...	18 8 0

50. Lanka Ghata Road, 3 miles.—Surface cleared and repaired where necessary. Rock at the summit cut away (127' × 5½' × 1½').

51. Branch road to Parao at Mhowa.—Kunkur collected 554 c.ft. consolidated in two layers, length 70' × 10'.

52. The following kutchra roads have been made :—

Jaipur to Ramgarh *via* Chaour ka Mand, 18 miles; but the sand is so heavy near Jaipur on this line that the road will be of little use unless it is metalled.

Another way was also tried *via* Naila, 22 miles, 13 of which is already metalled; the nullahs between Naila and Ramgarh were sloped down, the road marked out and distance stones put up.

These roads were prepared in case the members of the Irrigation Commission, or the Hon'ble the Agent to the Governor-General, wished to visit the work (Crosthwaite Sagar) near Ramgarh.

## IV.—IRRIGATION.

53. **Number of Works.**—The total number of irrigation works in the State under the management of this department is—

					Rs.
Completed works	...	...	...	...	176
Works in progress	...	...	...	...	23
Total				...	199

The main ducts vary in width from 5 to 20 ft. Total length 732 miles, with 664 miles of distributaries.

A printed statement is kept showing the nature of each work, drainage area, capacity, length and size of distributaries, area capable of being irrigated, duty of water, expenditure and returns up to date.

54. **Expenditure.**—The total expenditure on irrigation works during 1901 was Rs.2,56,187-3-0.

55. **Revenue.**—The revenue for the year ending 31st August 1901 was Rs.2,69,123-6-9.

The capital outlay, including the amount spent on repairs up to December 1901, is Rs.60,33,631.

The total return on this outlay is approximately Rs.49,37,678.

The details for the year ending 31st August 1901 are—

	East.	West	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
By water rate	30,897 7 6	32,993 10 9	63,891 2 3
„ share of produce...	1,01,199 14 3	85,881 4 0	1,90,081 2 3
„ Wells	*16 14 0	.....	16 14 0
„ Miscellaneous	13,682 12 9	1,451 7 6	15,134 4 3
Total	1,48,797 0 6	1,20,326 6 3	2,69,123 6 9

	Rs. a. p.
* Water rate	7 6 9
Share of produce	9 7 3

56. **The charges for supervision and guarding were—**

	Total cost.	Cost per bigha.
	Rs. a. p.	Rs. a. p.
For the Eastern district	7,892 1 4	0 3 1
„ Western „	10,925 15 7	0 3 10
Total	18,818 0 11	.....

The statement submitted by the Zillahdars Abpashi, Appendices F and G, show the nature of the crops and other details.

The Zillahdars for the Western and Eastern districts, Lala Moonee Lal and Munshi Nund Kishore, B.A., and their Naibs, Lala Hira Lal and Lala Kanhaya Lal, B.A., take an interest in their work.

57. Areas irrigated were as follows :—

	East.	West.	Total
	Big bis.	Big. bis.	Big. bis.
By flow ... ..	36,499 15	41,620 7	78,120 2
„ lift ... ..	1,946 16	1,439 7	3,386 3
In tank beds ... ..	1,608 11	2,274 2	3,882 13
Khalsa gardens ... ..	... ..	13 10	13 10
Total ... ..	40,055 2	45,347 6	85,402 8

The areas cultivated were—

	East.	West.	Total.
	Big. bis.	Big. bis.	Big. bis.
Single crop ... ..	36,830 16	42,957 0	79,787 16
Double ... ..	1,615 15	102 14	1,718 9
Total ... ..	38,446 11	43,059 14	81,506 5

The following is the share of *Khalsa* and *Jaghir* :—

	East.	West.	Total.
	Big. bis.	Big. bis.	Big. bis.
Khalsa ... ..	24,244 8	30,536 4	54,780 12
Jaghir ... ..	14,202 3	12,523 10	26,725 13
Total ... ..	38,446 11	43,059 14	81,506 5

58. Rainfall.—Attached is a statement (Appendix I) furnished by the Superintendent, Raj Dispensaries, showing the rainfall at different places in the Jaipur State.

59. The Rainfall, Expenditure & Returns can be seen at a glance on the diagram on the opposite page for each year since 1872.

60. Lawa.—The Thakurs of Lawa have from time to time been encouraged to make tanks in their land, which comprises an area of about  $7 \times 3\frac{1}{2}$  miles only, and they have been assisted by this department as regards advice and surveys, the works being carried out and paid for by the Thakurs.

The statement on the opposite page, supplied by the Thakurs of Lawa, is interesting as showing the original cost and results of works carried out in this way.





STATEMENT showing Expenditure and Returns from the Irrigation Tanks constructed by Thakurs of Lawa, assisted by the P. W. D.

No.	Name of Tank.	Expenditure.	Income during 1901.	When constructed.	REMARKS.
		Rs. a. p.	Rs. a. p.		
1	Ram Sagur ...	5,400 0 0	1,158 15 3	1871	
2	Dhirat Sagur ...	13,901 0 0	1,988 1 3	1877	
3	Sultan Sagur ...	7,382 15 0	455 15 3	1896	Owing to scanty rainfall the tank has not filled to its full capacity, and hence the full area commanded below has not come under cultivation.
4	Bijey Sagur ...	10,651 9 6	674 5 6	1897-98	All the land below the tank has not been brought into cultivation as yet.
5	Sheo Sagur ...	8,113 5 9	...	...	In progress—work commenced in 1900. When the tank fills it will be capable of irrigating about 500 Bighas.

Note.—The revenue in this Thikana is taken :—

(a) For cereal crops, one-third of the gross produce in this Thikana.

(b) Cotton, tobacco, zira, &c., Re. 1 per Bigha in cash.

(c) Tank irrigation—five annas per Bigha



61. **Ramgarh or Crosthwaite Sagur.**—The description of this interesting work has been given in previous reports. Owing to scanty rainfall, the water only filled up to 37 ft., out of 70 ft. All that came however was stored and is being used in irrigation.

The Assistant Engineer, Lala Rup Chand, has in his report (which is attached) described the details of work done.

The sand for the main dam was brought by side-tipping wagons on a portable railway of 16" gauge from a distance of about 2,000 ft., the quantity has been 3,305,272 c.ft. and the cost about Rs.4-8-7 per 1,000 c.ft.

Dry rubble pitching has been spread over the inner slope 1 in 4, average thickness  $1\frac{1}{2}$  ft. and cost Rs.2-3-8 per 100 c. ft.

The rear slope is to be also covered with rubble pitching, as this is considered to be the best means of preserving the sand of which the dam is made from being injured by wind or other cause.

The upper section of the sand dam has been slightly modified, as it is not thought necessary at present to make the dam above H. W. L. (70 ft.) as thick as it was originally proposed.

A cut stone parapet  $15" \times 12"$  has been put along both sides of the masonry portion of the dam with an iron hand rail.

The main canal 20 ft. wide as far as Parasoli—after that 15 ft. has been completed so as to allow the water to pass freely as far as Dosa— $21\frac{1}{2}$  miles, where it tails into the large tank called Gaitolao. The total fall in this distance is 105 ft. The slope of the bed varies from  $2\frac{1}{2}$  to 3 ft. per mile, and the rest of the slope has been divided into 27 masonry falls, each with a 2 ft. drop into a water cushion 2 ft. deep. Above each fall rajbahs are taken off right and left for irrigation, the water being controlled by boards sliding in cut stone grooves. 34 new rajbahs of a total length of 20.31 miles from 3 to 6 ft. wide have been made.

Where the canal crosses 2 nullahs in the 5th and 6th miles at Daber and Newar, masonry aqueducts have been provided. It may be possible hereafter to bund up these nullahs and catch any surplus water, and divert it, by the canal, to tanks further on, in the same way as the cross drainage everywhere else is treated. Five inlets with water-way from 10 to 30 ft. have been made this year.

Two bridges have been built 12 ft. wide between parapets provided with steps to the water on one side, and with wooden planks in cut stone grooves for raising the water level when required.

A masonry escape 30 ft. long has been provided at Jaisingpura: the water up to 3 ft. deep is passed down the canal; over 3 ft. can be allowed to escape here safely.

62. **Kautli Inundation Cut.**—During the year the following works were carried out in connection with this project.

1. A permanent diverting spur was constructed in the river bed, so as to define its course at the mouth of the cut.

This diverting spur is 1,940 ft. long, about 10 feet high, up-stream slopes 4 to 1, down-stream slopes 2 to 1, width at top 10 ft.

It is pitched up to 6 ft. above the river bed on the up stream side and at its nose.

The cost of this work was about Rs.3,000.

2. The inundation cut 100 ft. wide was cleared of drift sand, and a central drift 20 ft. wide cut down the centre at a cost of about Rs.1,000.

3. At the urgent request of the villagers of Bagar, a strong training bund was constructed at the point where the Chirawa Road crosses the line of flow from the cut. The cost of this work was about Rs.3,000.

The result of the rains was disappointing. Only one small flood came down the river, practically all the water of which was diverted down the cut. The rains, which had been light throughout the monsoon, completely ceased by the middle of August.

Such amount of water as came down the river passed down the cut and was absorbed in the sands north-east of Bagar.

The result of this flood has unfortunately been to deposit silt in the cut to a depth varying from a few inches to  $1\frac{1}{2}$  ft.

It is hoped that in a good monsoon satisfactory results will be obtained, but the question of silt deposit will always be a difficulty, and the cut will continually require clearing of the sand drifted into it by the high winds of the hot season.

**63. Sheodungri Bund**—Described in last report.—A morinda core wall has been built across the nullah portion. Owing to scanty rainfall only 20 ft. of water came into the tank, that is, 7 ft. above sluice bed.

Work done	...	463,379 c. ft. earthwork at	Rs. 3 11 4 per 1,000 c.ft.
"	...	65,154 " morinda core wall at	" 10 1 6 " "

The canals, sluices and a bridge at the main Tonk road are in hand.

**64. Halolao Bund Newai**.—Taken up as a famine relief work last year and mostly done through the Tehsildar of Newai. Nullah gap has been closed up and masonry outlet sluice provided. Two supply cuts and the canal are in hand.

**65. Rabiota Bund**.—Work of raising 2 ft. completed. Masonry core wall extended 1,000 ft.

**66. Chandlai**.—Raising 3 ft. very nearly completed. 529,445 c. ft. earthwork done. Working rate Rs 3-3-1 per 1,000 c. ft. The ducts were repaired also.

**67. At Sangarir**.—The canals were cleared and petty repairs were done also to the Chandlai supply cut from the Amani Sha.

**68. Bhagwantgarh Bund**—has been repaired at a cost of Rs.146-14-3.

**69. Khir**.—In the south main canal, mile 1, a bridge, 3 spans of 4 ft., has been built. In mile 3 two masonry falls provided with 10 ft. water-ways. The road surface of bridge Bhoomiawala in mile 1 re-metalled and rest-house repaired.

**70. Bhairon Talao near Thulli**.—H. W. L. raised from 5 to 8 ft., the embankment, 2,350 ft. long, raised and extended 115 ft. Masonry sluice provided containing 14 holes for wooden plugs.

**71. Sainthal Sagur**.—Work of raising the bund partly done last year so as to be 10 ft. above H. W. L. completed. Work done 2,031,561 c.ft. Babul seed sown on outer slope. Chowki repaired.

It may be possible to take canals north of Sainthal to irrigate the *mal* there and south to irrigate the lands of Bapi: the Zemindars at both places are eager for water. The matter is under investigation.

**72. Shendoli Supply Cut**.—Wheel gear at head sluice repaired; 8 irrigation sluices (3' x 3') and 29 ft. long provided; 4 new bridges of 3 openings (3' x 4') built for cart traffic; a new duct made (1,500' x 3') from Beenawala; dry stone pitching added to in falls Nos. 3, 5 and 7; patries made up and repaired where necessary.

73. **Bund Shendoli.**—In the Kalota canal, mile 1, a masonry fall 3 ft. with 10 ft. waterway was built, and side sluices, each 3' × 3' provided above it, for irrigation right and left.

The branch No. 1 of Khora canal has been lengthened 4,700 ft., and branch No. 4 1,162 ft., each 3 feet wide.

Stones have been erected in the bed of the tank to mark the 8 ft. contour, and the irrigation ducts cleared.

74. **Bankri Tank.**—The supply cut repaired in the rains; 6,076 c. ft. earthwork done.

75. **Dhund Sagar at Burial near Baidikui.**—Repaired last year 5,000 ft. long. Completed this year. Total length 6,500 ft., top breadth 6 ft., greatest depth of water 7 ft., height above H. W. L. 4 ft.; a masonry sluice with 14 holes 6" diameter provided.

76. **Bijey Sagar at Buswah.**—Masonry core wall of sluice 181 ft. long has been raised 2 ft.; 4 stone slabs and 7 locks provided at the tilting shutters of the supply cut.

77. **Gudha Tank.**—A new supply cut 1,147' × 10' made. Earthwork done 29,941 c. ft. Chowki repaired.

78. **Kund Jatoli.**—Stone slab provided over the steps in sluice.

79. **Gaitolao.**—Sluices Nos. 1 and 3 raised 2 ft., and masonry core walls provided on both sides. Sluice No. 2 and its core wall.

80. **Haripura.**—The supply cut repaired; 5,849 c. ft. earthwork done.

81. **Mora Sagar.**—The five escapes, total length 444 ft., have been raised 2 ft., increasing the capacity of this fine reservoir by 119,000,000 c. ft., at an estimated cost of only Rs. 823. In escape No. 1 cut stone pillars with double grooves provided. The front wall, 58 ft. long, of water cushion below No. 2 escape raised 1 ft. Near Toda on No. 2 branch a small bridge, one span of 4 ft., has been built. From branch No. 4, mile 5, a new duct has been made towards Bamanwas, length 12,500 ft., breadth 7 ft., depth 1½ ft. Wooden planks provided in sluices 228 sq. ft. Chowki repaired and silt cleared in canals 222,243 c. ft.

82. **Kund Mora.**—Dry stone pitching repaired on the front and the back, 3,942 c. ft.

83. **Nazimwala at Bamanwas.**—Partly done last year as a famine work. Completed 3,550 ft. out of 8,500 ft.

84. **Naya Talao.**—Masonry core walls added on both sides of the 2 sluices, each 10 ft. long.

85. **Binouri Sagar.**—Escape at north end closed and embankment extended. Earthwork done 4,19,719 c. ft. Parapet of outer wall of sluice repaired.

86. **Lewali.**—Two wooden pulleys provided, and dry stone masonry of the sluice of Kolabah repaired 620 c. ft.

Mori Nawund—dry stone pitching repaired 640 c. ft.

Khatana sluice iron chain and lock provided; escape in mile 3 repaired 28 ft. long with masonry.

A new masonry sluice, 2 openings, each 4' × 3', built to fill the tank of Mangi Lal Shah.

At mile 5 a new duct dug to fill Tajewala tank 3,492' × 8' × 1'.

At mile 4 bridge at Nawund surface remodelled 38' × 9'.

Tiled roof of chowki repaired.

Silt cleared from canal 167,758 c. ft., from Kolabah 43,964 c. ft.

87. Nigoh Sagur.—Bank cut  $75' \times 9' \times 6\frac{1}{2}'$  to allow passage of well water to irrigate land side.

88. Ram Sagur, Malarna.—Embankment lengthened 450 ft. at the north end, where masonry escape was damaged, and a new masonry escape provided  $150' \times 2' \times 3'$ .

Ladota bridge repaired 2,463 cft. earth work. Chowki repaired with corrugated iron sheet roof, and ducts cleared of silt 46,879 c. ft.

89. Jai Sagur.—Embankment repaired 13,586 c.ft., ducts cleared of silt 57,746 c. ft.

90. Dhund.—Embankment repaired 8,845 c.ft., ducts cleared of silt 16,536 c. ft.

91. Dehulra.—Embankment repaired 70,173 c.ft., ducts cleared of silt 56,465 c. ft.

92. Durga Sagur.—Embankment repaired 24,500 c. ft., ducts cleared of silt 6,100 c.ft.

93. Naglao.—Repaired 57,079 c. ft., silt cleared 25,045 c. ft.

94. Baragaon New Tank—Consists of an earthen bund 7,500 ft. long; greatest height 20 ft., top width 8 ft., inner slope 4 to 1, outer 2 to 1. In two places a rammed earth core wall has been put in 700 ft. long and 1,000 ft. long. Two outlet sluices have been provided  $1\frac{1}{2}$  ft. diameter at the east end, where the water is 10 ft. deep, and 1 ft. diameter at the west end in 8 ft. depth.

95. Moti Sagur.—A masonry core wall has been built in the foundations  $280' \times 8' \times 2'$ , in superstructure  $200' \times 15' \times 1\frac{1}{2}'$  and  $38' \times 3' \times 1\frac{1}{2}'$ .

96. Ram Talao.—A supply cut dug  $2,400' \times 5'$ .

97. Benywala at Udai.—Two sluices with 2 holes each 6" diameter have been put; 114,000, c.ft. earthwork done.

98. Johriwala.—Bank widened, 12,500 c.ft. earthwork done, duct cleared.

99. Shamashpur —Three wooden shutters provided.

100. Salempur.—Six do. do.

101. Rondh Jugrampura.—Sluice repaired, a supply cut in progress.

102. Kot Bund.—Supply cut cleared  $4,000' \times 10'$ .

103. Hurla Bund.—Supply cut dug one mile long  $10' \times 1'$ , and sluices repaired.

104. Madho Sagur.—East canal cleared, length 6 miles—Western canal for 1 mile. Main canal repaired 954 ft. long. Aqueduct No. 19 wing walls extended ( $30' \times 13'$ ) and ( $20' \times 13'$ ).

105. Gundal Bund.—A gap repaired 50 ft long, 20,816 c. ft. earthwork done and duct repaired.

106. Bara Talao.—Gap repaired, 8,008 c. ft. earthwork done.

107. Hoda Hali.—Ducts and branches repaired.

108. Bishun Samand.—Supply cut cleared,  $6,308' \times 2' \times 2'$ . Iron sluice repaired, door made to gateway, wooden planks and plugs provided where necessary.

109. Fateh Sagur.—Petty repairs done, main duct and branches cleared.

110. **Kiria Tank, Phaggi.**—A small tank about  $\frac{1}{4}$  of a square mile in area. Earthwork completed in 1900. An ordinary sluice with wooden plugs has been built, and a canal 1.02 miles long and 5 ft. wide has been dug this year—Cost Rs.709-5-6.

111. **New Mandi Tank.**—Spreading over an area  $\frac{1}{10}$  square mile. Earthwork completed in 1900. Canals 1.06 mile, long 4 ft. wide dug, and ordinary sluice with wooden plugs built this year. The old cart track leading to the village having been submerged, a “*nath*” or partition bund with a pucca culvert to connect the divided water is being made.

112. **Pachala Tank.**—Area  $\frac{1}{10}$  square mile, ordinary sluice provided and two canals made. One 0.36 mile long 5 ft. wide, the other one mile long 4 ft. wide.

113. **Churu Sagur.**—A masonry core wall 1,700 ft. long and earthwork on both sides of it has been completed. A masonry sluice worked by an iron valve 15" diameter has been provided. It is proposed to raise this tank, and the necessary surveys have been made. Expenditure on this work Rs.9,209-10-6.

114. **Dholai Tank.**—A masonry sluice with plug openings built and canals being dug.

115. **Bodia Tank.**—Two pucca sluices built—one worked by an iron valve 1 ft. diameter, the other by wooden plugs. Two canals dug, each 4 ft. wide, one 0.52, the other 0.34 mile long being dug. Expenditure Rs.898-7-0.

116. **Govindi Tank.**—One iron outlet valve provided to 8" diameter to serve for irrigation as well as to empty the jheel above it.

117. **Bagait Tank.**—An ordinary masonry sluice built worked by wooden plugs.

118. **Sahadra Tank.**—Two sluices worked by wooden plugs have been built, and ducts from them, each 4 ft. wide and 0.36 and 0.18 mile long, have been made.

119. **Renwal Tank.**—Has been completed. This was one of the works carried out as a famine relief work. Cost Rs. 7,755-7-9.

120. **Augur Sagur near Mozabad.**—Made this year. An earthen bund 1.22 miles long, 8 ft. wide at top, inner slope 3 to 1, outer 2 to 1, to hold up 4 ft. of water over sluice—a masonry sluice with plug openings has been built.

It can be filled from the Chaparwara canal if it does not fill naturally. The supply cut and ducts are in progress. Expenditure Rs.1,476-7-6.

121. **Chaparwara Supply Cut.**—To divert water from the river Mashi to Chaparwara Sagur. As stated in the previous report, three alternative proposals were drawn up. The one adopted consists of digging the canal 30 ft. wide and 2 ft. deep to avoid rock cutting. Last year the upper 2 ft. of earth was removed simply to afford work for the famine-stricken people.

The canal has now been dug to its proper bed, and the last 7 miles, nearest to Chaparwara Sagur, are ready as far as earthwork.

The canal crosses two nullahs of Gagru and Kachnarina; the former has been closed by a masonry face wall, backed by earth, to catch the water this year. The bed of the nullah is 6 ft. below the bed of the supply cut, and though the work was completed before the rains, the water never rose in the nullah above 5 ft. owing to the failure of the rains. Total expenditure this year Rs.5,431-11-3.

122. **Hingonia Weir on the river Bandi.**—This was not ready in time to fulfil its object, viz., to divert the flood water to Sahadra tank, and eventually it is hoped to other tanks also.

It is being raised 3 ft., and the proposal to make a large storage reservoir here is under consideration.

The site is a good one, and the work will afford relief now and be profitable hereafter. Total expenditure this year, Rs.1,950-6-0.

**123. Kheri Weir.**—Is at mile 6 of the Chaparwara South Canal, where it crosses the river Mashi. Hitherto a temporary sand bund, after the rains, was annually put across the river-bed to lead the canal water across; in order to do away with the delay and the annual expense, a permanent weir has been built across the river Mashi. Length 318 ft., 4 ft. high. No rock was found here in the bed, so a broad shallow foundation has been tried 6 ft. below the bed surface of the river—protected by heavy pitching of rubble 2 ft. deep over a consolidated kunkur bed 15 ft. broad 1 ft. deep. Rough blocks of masonry about 10 ft. long, 2 ft. wide, 5 ft. high, sunk 3 ft. in the bed of the river, have been built along the toe, to keep the rubble pitching in its place.

The work was begun in May 1901, by removing the temporary sand bund after irrigation ceased. Much difficulty was experienced in getting in the foundations owing to the water in the river bed.

During construction five small floods occurred; the first three passed over the incomplete work but did no damage. When the last two floods came the weir was high enough to divert some of the water down the canal to fill tanks below, which is one of the objects in view.

The work was done in time for the winter irrigation. Unfortunately there was no water in Chaparwara this year. Total expenditure this year Rs.4,258-6-6.

**124. Fariadpura Koond.**—This is a masonry cistern 25 ft. in diameter, filled by a duct of the Chaparwara Canal. Water is raised  $16\frac{1}{2}$  ft. from the cistern by "charas" to irrigate the land at the higher level. There is room for 10 charases to work at the same time. Total expenditure Rs.827-11-0—This year Rs.109-6-0.

**125. Kala Talao Nirana.**—The wooden plug outlet arrangement has been replaced by an iron screw valve of 9" diameter, with gun metal faces with screwed raising rod.

**126. Moti Sagur Churu.**—10 ft. of masonry core wall has been added to the sluice on either side.

**127. Akheypura Branch (Kalegh Sagur Canal).**—The lower bank is being strengthened—6 miles done—work in progress. Expenditure Rs.737-9-3.

**128. Chaparwara Canal South low level.**—The lower bank strengthened for 6 miles and repairs done where required.

Do. *North low level.*—Lower bank strengthened in 5 miles and repaired where necessary.

**129. Kalegh Sagur Canal.**—Lower bank strengthened in six different miles.

**130. Maintenance.**—The charges for repair and guarding of tanks this year in the district under Lala Indra Sahai, Assistant Engineer, only amounted to Rs.192-7-3.

No permanent beldars were kept. All the improvements of the Chaparwara and Kalegh canals noted above were done by means of task work. The expenditure has been carefully supervised, and it is hoped will lead to economy and greater efficiency in future.

**131. Bhairon Sagur, Chaudsen.**—Alluded to in the last report as having been started as a relief work, about 7 miles north-east of Malpura. The bund is 1.34 miles long; will catch the drainage of 60 sq. miles. Capacity 524.6 millions c. ft. at 20 ft. deep, spreading over an area of 2.29 sq. miles, and when full capable of irrigating 4,371 acres.

There will be a masonry core wall 3,900 ft. long, of which 2,300 ft. has been made, and the earthen bund, about 2,000 ft. long, on either side of the nullah nearly ready. Earthwork done during the year is 1,097,238 c. ft.; up to date 5,589,652 c.ft. at Rs.4-4-6 per 1,000 c. ft.; masonry work done 54,912 c. ft. at Rs. 15-5-9 per 100 c. ft.

*Detail of Expenditure.*

ITEMS.				During 1901.	Up to date.
				Rs. a. p.	Rs. a. p.
1.	Earthen bund	...	...	5,892 2 0	21,528 11 9
2.	Masonry	...	...	9,139 14 0	10,434 14 6
3.	Low-level outlet sluice	...	...	...	0 8 6
4.	Irrigation canals	...	...	731 15 0	2,820 10 3
5.	Compensation for wells	...	...	...	500 0 0
6.	Sheds for workpeople	...	...	587 7 6	1,719 8 6
7.	Famine expenditure	...	...	...	23,593 14 10
8.	Tramway, portable	...	...	162 9 6	162 9 6
9.	Contingencies	...	...	3,388 4 4	4,636 8 10
10.	Material in hand	...	...	2,367 8 0	5,154 10 3
Total				22,269 12 4	70,552 0 11

132. **Rampura Tank.**—A village tank near Rajmahal being raised and extended. Capacity 3·29 millions c. ft., length 0·62 miles, area when full 30 acres, depth over sluice 6 ft., capable of irrigating 82 bighas.

133. **Kalanada near Panwar.**—A new work started last year as a relief work. Capacity 8·75 millions c. ft., length 1·22 miles, depth of water 5 ft.

This year a sluice of masonry worked by wooden plugs has been built and two canals dug each 5 ft. wide and each 0·42 mile long.

134. **Gopipura.**—A small tank near Panwar started as a relief work last year. A masonry sluice with wooden plugs has been built and two ducts each 5 ft. wide, ·28 and ·18 miles long, have been made.

135. **Utarna, near Panwar.**—Two ducts each 5 ft. wide, ·42 and ·26 miles long, have been dug.

136. **Hashapura.**—A masonry core wall in three places, total length 600 ft long, has been built. The expenditure this year has been Rs.1,686-8-6.

137. **Bainra Tank, near Toda Rai Singh.**—Completed; expenditure this year Rs.699-1-6.

138. **Khuara.**—An old village tank raised and extended; sluice and ducts in progress. Expenditure this year Rs.3,533.

139. **Napolao, at Bagri.**—An old village tank raised and extended, and supply cut made from a nullah adjacent. Rs.1502 4-9.

140. **Sawuntgurh Bund.**—Masonry core wall 200 ft. long has been completed. Earth-work repaired; expenditure Rs.669-0-3.

141. **Punwar Bund.**—Repaired where necessary. Rs.590-3-9.

142. **Nasrida.**—This bund was raised 3 ft. and extended 900 ft. ; 50 ft. masonry core wall has been added and the old core wall raised 3 ft. Expenditure Rs.1,729-10-6.

143. **Gangolao.**—Two sluices with wooden plugs have been replaced by iron sluices of 9" diameters.

144. **Rupahaili.**—In two places the masonry core wall has been added 13½ ft. and 300 ft. in length. The proposal to raise this tank 2 ft. has been sanctioned.—Expenditure Rs.657-15-11.

145. **Tori Sagar Canals.**—The nullah near Tori used sometimes to bring much silt to the north main canal. This nullah has been bunded up and diverted at a cost of Rs.692-15-6. One bridge has been built over the L. L. South Canal near Jalapur.

**Low Level North Canal.**—In 1900 this canal was breached in several places by the sudden rush of water brought by hill streams, which are intercepted by this canal. The gaps were temporarily closed to allow of irrigation, but proper repairs have been started—much remains to be done. The expenditure, Rs. 1,851-0-3, this year has therefore been high.

The Rampura nullah escape was washed away in 1900, by the sudden bursting of a village tank above, has been repaired.

Rs. 324 were spent on maintenance of these canals, but it is hoped now that they have been put under Assistant Engineer Lala Indra Sahai, there will be a marked improvement.

146. **Turbines,** worked by the water as it leaves the Tori Sagar through the sluices have ground 1,400 maunds 19 seers of grain for Rs.353-5-10, against an expenditure of Rs.184-12-0.

147. **River Mashī South Supply Cut.**—This canal was widened from 15 to 30 ft. in 1900 as a relief work, and its full supply level increased from 3 to 5 ft. All the masonry works, sluices, &c., had to be altered to suit the increased depth of water.

One bridge has been widened and 28 side sluices have been improved and the face walls raised.

The work of altering one escape, 4 side sluices, 10 well ducts, 3 syphons, 4 aqueducts and that of 4 new sluices is in hand. Expenditure incurred Rs.4,603-11-6.

#### V.—MISCELLANEOUS PUBLIC IMPROVEMENTS.

148. **Water Works.—Water raised.**—During 1901 the amount of water pumped into the reservoir 110 ft. high was as under :—

				Revolutions.	Gallons.
By the former engines	...	...	...	6,736,307	181,880,289
„ new „	...	...	...	1,565,689	108,032,541
„ well „	...	...	...	841,134	12,662,010
Total				...	302,574,840

The daily average for the past three years has been—

					Gallons.
1899	...	...	...	...	... 817,560
1900	...	...	...	...	... 747,159
1901	...	...	...	...	... 898,972



*Consumption per head*, taking the population at 1,60,000, is 5·18 gallons.

*Cost of raising the water* has been—

	Total.	Cost per 1,000 gals.
	Rs. a. p.	Rs. a. p.
By former engines ... ..	27,993 6 7	0 2 5½
„ new „ ... ..	8,139 0 3	0 1 2½
„ well „ ... ..	2,499 7 11	0 3 1½
Total ... ..	38,631 14 9	

If all charges for distribution in the city, repairs, clearance of reservoirs and other items are included, the cost comes to Rs.44,819-6-3 or 2·37 annas per 1,000 gallons.

*Detail of charges.*

				Rs. a. p.
Labour on all engines combined	...	...	...	10,087 0 8
Fuel ... ..	...	...	...	27,490 7 10
Petty materials	...	...	...	1,054 6 8
Total	...	...	...	38,631 14 2

*Fuel consumed.*

				Maunds.
Coal	...	...	...	28,199·5
Wood	...	...	...	8,808

The cost of coal has been 14 annas per maund throughout the year. The price of wood (babool) 32 rupees per 100 maunds.

				Rs. a. p.
The cost for 12 months of clearing filter bed was	...	...	...	29 13 11
Clearing service reservoir	...	...	...	39 6 6
„ boilers and flues	...	...	...	40 8 1
„ water meters	...	...	...	27 13 5

*Repairs* done to the pumping engines and boilers, and the works carried out in the workshops attached to the works, are all given in detail in the report submitted by Mr. Dominy, the Engineer in charge, who reports well of his assistant, Mr. E. Baker and all the establishment under him.

149. The work done by the engines—is shown in the statements attached. The diagrams show the maximum and minimum heights of water in the reservoir, and the rain-fall during the year and consumption of water. Owing, however, to a large quantity of silt having accumulated in the bed of the reservoir, the height of water shown does not fairly represent the quantity available.





# MONTHLY REPORT OF WATER, WELL ENGINE, FOR YEAR 1901.

( 31 )

Months.	Hours work- ing.	Number of strokes.	Gallons pump- ed.	Wood.	Amount.	Coal.	Amount.	Sundries.	Labour	Total.
January ...	2	1,821	27,315	3	Rs. a. p. 0 15 4	6	Rs. a. p. 5 4 0	Rs. a. p. 0 13 0	Rs. a. p. 0 12 4	Rs. a. p. 7 12 8
February ..	6	3,533	52,995	3	0 15 4	12	10 8 0	0 13 0	0 13 1	13 1 5
March ...	5	2,985	44,775	3	0 15 4	10	8 12 0	0 13 0	0 12 4	11 4 8
April ...	4	2,697	40,455	3	0 15 4	9	7 14 0	0 13 0	0 12 4	10 6 8
May ...	3	2,170	32,550	3	0 15 4	7	6 2 0	0 13 0	0 12 4	8 10 8
June ...	4	2,670	40,050	3	0 15 4	9	7 11 0	0 13 0	0 12 4	10 6 8
July ...	164½	111,639	1,674,585	66	21 2 0	295	258 2 0	9 14 0	25 8 6	314 10 6
August ...	224	141,048	2,115,720	66	21 2 0	404	353 8 0	12 12 10	29 0 0	416 6 10
September	199½	123,648	1,854,720	60	19 3 2	356	311 8 0	11 3 0	28 15 9	370 13 11
October ...	231	157,353	2,360,295	75	24 0 0	449	392 14 0	13 4 0	29 0 0	459 2 0
November	237	249,288	2,239,320	69	22 1 3	429	375 6 0	12 5 0	28 13 3	438 9 6
December	231½	145,282	2,179,230	66	21 1 11	430	376 4 0	12 2 0	28 10 6	438 2 5
Total	1,331½	844,134	12,662,010	420	134 6 4	2,416	2,114 0 0	76 6 10	174 10 9	2,499 7 11

MONTHLY REPORT OF WATER, NEW ENGINE, FOR YEAR 1901.

Months.	Hours working.	No. of strokes.	Gallons pumped.	Wood.	Amount.	Coal.	Amount.	Sundries.	Labour.	Total.
January ...	73½	77,331	5,335,839	138	44 2 7	267	Rs. a. p. 233 10 0	Rs. a. p. 14 2 1	Rs. a. p. 202 4 0	Rs. a. p. 494 2 8
February ...	74	79,190	5,464,110	183	58 9 0	262	229 4 0	14 2 0	224 14 0	526 13 0
March ...	181	183,758	12,679,302	288	92 2 7	623	545 2 0	20 0 0	280 5 0	937 9 7
April ...	217½	236,158	16,294,902	358	114 8 11	800	700 0 0	32 2 0	293 11 6	1,140 6 5
May ...	280	303,220	20,922,180	433	138 9 0	1,010	883 12 0	40 9 6	358 9 8	1,421 7 8
June ...	273	292,717	20,197,473	388	124 2 7	978	855 12 0	34 5 0	332 2 0	1,346 5 7
July ...	12	12,840	885,960	15	4 12 9	42	36 12 0	1 2 9	27 11 3	70 6 9
August ...	3½	4,372	301,668	10	3 3 1	13.20	11 13 0	0 4 9	13 8 0	28 12 10
September ...	23½	24,527	1,692,363	63	20 2 7	94	82 4 0	2 9 10	85 8 3	190 8 8
October ...	177	195,208	13,469,352	293	93 12 2	658	575 12 0	20 3 6	303 1 2	992 12 10
November ...	120½	130,896	9,031,824	226	72 5 2	437	382 6 0	19 4 6	311 13 5	785 13 1
December ...	24½	25,472	1,757,568	73	23 5 9	100	87 8 0	2 4 3	90 11 2	203 13 2
Total ...	1,460	1,565,689	108,032,541	2,468	789 12 2	5,284.20	4,623 15 0	201 1 8	2,524 3 5	8,139 0 3

MONTHLY REPORT OF WATER, OLD ENGINES, FOR YEAR 1901.

Months.	Hours work- ing.	Number of strokes.	Gallons pumped.	Wood.	Amount.	Coal.	Amount.	Sundries.	Labour.	Total.
January ...	452½	528,415	14,267,205	457	Rs. a. p. 146 3 10	1,555	Rs. a. p. 1,360 10 0	Rs. a. p. 60 3 0	Rs. a. p. 580 10 10	Rs. a. p. 2,147 11 8
February ...	420½	488,502	13,189,554	397	127 0 8	1,582	1,381 4 0	52 5 3	562 3 4	2,125 13 3
March ...	468	540,467	14,592,609	472	151 0 7	1,767	1,516 2 0	60 14 0	509 0 3	2,267 0 10
April ...	467½	535,252	14,451,804	452	144 10 3	1,719	1,501 2 0	56 5 6	500 0 0	2,205 1 9
May ...	410	464,885	12,551,811	427	136 10 2	1,455	1,273 2 0	50 3 10	434 12 8	1,894 12 8
June ...	335½	385,411	10,406,697	382	122 3 10	1,170	1,023 12 0	45 5 3	518 5 8	1,709 10 9
July ...	784	914,008	24,678,216	785	251 3 3	2,777	2,429 14 0	103 0 6	831 10 0	3,615 11 9
August ...	687½	802,574	21,669,498	650	208 0 0	2,438	2,133 4 0	92 2 8	824 5 1	3,257 11 9
September ...	703½	817,657	22,076,739	622	199 0 8	2,147	1,878 10 0	87 11 0	769 11 6	2,935 1 2
October ...	290	336,478	9,084,906	387	123 13 5	1,619	891 10 0	50 0 0	551 3 4	1,616 10 9
November ...	317	367,366	9,918,882	417	133 7 1	1,142	999 4 0	48 4 3	538 11 6	1,719 10 10
December ...	482	555,294	14,992,938	472	151 0 7	1,728	1,509 6 0	70 6 6	767 8 4	2,498 5 5
Total ...	5818	6,736,307	181,880,289	5,920	1,894 6 4	20,499	17,934 0 0	776 13 9	7,388 2 6	27,993 6 7

( 83 )

				No.
150. Taps erected—for Raj or public use	...	...	...	17
„ Private „	...	...	...	Nil.
The total now in use for Raj or public is	...	...	...	909
And for private	...	...	...	318
			Total	1,227
				Rs. a. p.
151. Income.—Average monthly from private taps is	...	231	1	11
Expenditure.—Average monthly for supervision is	...	145	0	0

152. State of the Reservoir.—On the 1st January 1901 the water rose to 23 ft. 10 in. above outlet valve, but as 12 ft. 6 in. of silt had accumulated in the bed of the reservoir, the actual depth of water was only 11 ft. 4 in. Attention was frequently called to the deficiency of the water supply, and efforts were made to reduce the consumption and waste.

On the 18th May the following restrictions were imposed; the taps in the following quarters of the City, Top Khana Dais, Biseshurji, Modi Khana, and Purani Basti were kept open from 4 to 10 A.M. and from 4 to 9 P.M. only.

The taps of the Chowkries, Ghat Darwaza and Ram Chunderji were opened when the above were closed and *vice versa*.

The taps of the Palace, Hathroi Kothi, Atish, Ilawa Mahal, and Mayo Hospital, the Kotwali, the central jail and Lansdowne Hospital were left open day and night.

The taps at the Cotton Press were opened only when water was required for working.

An exception was also made in the case of the Dharamsala of Maji Sahiba near the Chandpol and in a private carpet factory.

In the meantime the level of the water fell to 17 ft. 1½ in. when the rains came. The total fall registered for the year was 15.55 inches; the level of the water rose to 20 ft. 6 in.; deducting the depth of silt it left only 8 ft. water in the bund, and this soon became so foul that it was almost undrinkable, and it was only by letting it run out into the lower pool and mixing it with a large quantity of filtered water that it could be used. No rain has fallen at Christmas, and it is almost certain that water from parts of the city will have to be shut off.\*

In order to prevent silt from accumulating in front of the outlet well and blocking the pipes in future, a rubble stone bund is being put round an area 300' × 50' and inside this area wells with perforations in the side are being sunk.

It is hoped the rubble stone (which is covered on the outer side with bujri) will allow the river water to percolate freely through it so that no head of water will be lost, while silt will be prevented from coming in front of the outlet well. It is also hoped that the wells will admit of the spring level, below the silt, being tapped; they will be connected with each other and more can be added if found advisable.

---

\* Water was shut off from two thirds of the city on the 1st February 1902.

---

## APPENDICES.

---



## APPENDIX A.

ABSTRACT of Receipts and Expenditure on the Public Works Department, Jaipur State, during the year 1901.

Serial No.	Heads of Account.	Receipts.			Expenditure.			Net Receipts.			Net Expenditure.			REMARKS.
		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	
	<i>Balance on 1st January 1901.</i>	37,651	6	5	...	...	...	37,651	6	5	...	...	...	
1	Original works buildings	118	4	2	17,678	2	3	...	...	...	17,559	14	1	
2	Do. communications	31	8	0	5,026	14	5	...	...	...	4,995	6	5	
3	Repairs to buildings	4,650	12	5	21,643	2	2	...	...	...	16,992	5	9	
4	Do. communications	76	3	6	86,516	12	4	...	...	...	86,440	8	10	
5	Miscellaneous public improvements	6,268	3	8	77,000	8	8	...	...	...	70,732	5	0	
6	City waterworks	2,025	3	11	48,818	3	10	...	...	...	46,792	15	11	
7	State Cotton Press, Jaipur, Capital Account	10	14	5	5	9	1	5	5	4	...	...	...	
8	Do. Mandar. do.	...	...	...	943	14	1	...	...	...	943	14	1	
9	Irrigation works	10,958	12	9	2,67,145	15	9	...	...	...	2,56,187	3	0	
10	Imarat works	662	0	0	61,745	1	1	...	...	...	61,083	1	1	
11	Other State works	1,827	5	6	3,053	4	3	1,827	5	6	3,053	4	3	
12	Establishment	100	1	6	67,081	9	8	...	...	...	66,981	8	2	
	<b>Total</b>	26,729	5	10	6,56,659	1	7	1,832	10	10	6,31,762	6	7	
	<i>Miscellaneous Items.</i>													
13	Raj Treasury Public Works Department	6,51,842	4	3	61,216	5	2	5,90,596	15	1	...	...	...	
14	Do. Imarat works	52,764	15	11	4,930	8	3	47,834	7	8	...	...	...	
15	Miscellaneous advances	4,12,337	10	3	4,34,253	4	2	...	...	...	21,915	9	11	
16	City water supply revenue	2,812	3	0	2,837	0	0	...	...	...	24	13	0	
17	Ram News Garden do.	1,532	13	7	1,816	15	4	...	...	...	284	1	9	
18	Agra Kothi do.	490	0	0	380	0	0	110	0	0	...	...	...	
19	Ice do.	2,331	4	5	2,537	14	3	...	...	...	206	10	0	
20	Dak bungalows rent	789	4	6	788	13	6	0	7	0	...	...	...	

21	Roads (sale of dry trees, &c.) revenue	...	268 10 0	1,205 12 9	...	...	937 2 9
22	Sale of Jaipur Portfolios	...	450 8 0	381 2 6	69 5 6	...	...
23	Fine Account	...	362 1 2	201 0 0	161 1 2	...	...
24	Unclaimed wages...	...	1,042 11 9	1,043 7 4	...	0 11 7	...
25	Security deposit	...	130 0 0	412 0 0	...	282 0 0	...
26	Profit and Loss	...	3,089 4 8	6,104 6 6	...	3,615 1 10	...
27	Lime manufacture	...	5,799 7 0	6,185 14 10	...	386 7 10	...
28	Workshop contingencies	...	1,937 3 7	1,926 0 10	11 2 9	...	...
29	Stock Account	...	24,049 11 10	26,493 2 8	...	2,443 6 10	...
30	City water supply stock	...	18,399 5 8	8,605 8 1	9,793 13 7	...	...
31	Ram Nevas Garden, general stock	...	3,425 11 4	2,577 1 6	848 9 10	...	...
32	Theft of late Munshi Lal Singh	...	182 3 9	...	182 3 9	...	...
33	Tori Sagur turbine revenue	...	...	206 7 5	...	206 7 5	...
34	Theft of Vafati, carpenter	...	13 5 9	13 5 9	13 5 9	13 5 9	...
35	Keep of horses for the Executive Engineer, Jaipur	...	...	739 0 3	...	739 0 3	...
36	Travelling, &c., expenses of officers in Eastern Dist.	...	...	1,405 6 10	...	1,405 6 10	...
37	Cricket play in Ram Nevas Garden...	...	...	150 0 0	...	150 0 0	...
38	Inter-departmental transfers	...	...	85 11 3	...	85 11 3	...
39	Preparing a tracing of <i>Firman Shali</i> for Raja Soonder Lal	...	3 0 0	15 13 2	3 0 0	15 13 2	...
40	Pensions	...	...	3,781 14 0	...	3,781 14 0	...
41	Queen Victoria Memorial Fund	...	791 11 3	791 11 3	791 11 3	791 11 3	...
42	Printing map of Jaipur State...	...	...	1 2 9	...	1 2 9	...
43	Repairing boat for Rawajee's Bund	...	34 0 3	39 7 7	34 0 3	39 7 7	...
44	Printing band programme cards	...	...	20 8 0	...	20 8 0	...
45	Supplying maps to the Raj Pothikhana	...	...	36 12 0	...	36 12 0	...
46	Expenses connected with the Irrigation Commission	...	...	71 15 9	...	71 15 9	...
47	Supplying measuring tape to the Nazim of Bandikui.	...	...	7 7 9	...	7 7 9	...
48	Cost of wooden logs (lathas) Pachrung, Rahdari Ghora Nikas, &c., sent to Sairat office	...	...	32 2 0	...	32 2 0	...
49	Imperial Coronation Assemblage at Delhi	...	...	104 4 8	...	104 4 8	...
50	Maps of the Jaipur State for the members of the Council, Jaipur	...	...	0 5 3	...	0 5 3	...
Total		...	11,84,879 7 9	5,72,029 13 2	6,50,449 3 7	37,599 9 0	...
Total		...	12,49,260 4 0	12,28,688 14 9	6,89,933 4 10	6,69,361 15 7	...
Balance on 31st December 1901.		...	...	20,571 5 3	...	20,571 5 3	...
GRAND TOTAL		...	12,49,260 4 0	12,49,260 4 0	6,89,933 4 10	6,89,933 4 10	...

# APPENDIX B.

STATEMENT of works executed in the Public Works Department, Jaipur State, during the year ending 31st December 1901.

Serial No.	Name of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
			Rs. a. p.	Rs. a. p.	Rs. a. p.	
ORIGINAL WORKS.—BUILDINGS.						
1	Works for buildings of Rao Bahadur Babu Kanti Chunder Mookerji, C.I.E. ...	12,540 5 9	12,465 6 2	1,197 7 7	13,662 13 9	
2	Dispensary building at Mhowna ...	8,643 0 0	8,858 9 0	.....	8,858 9 0	
3	New wards for females to the west side of old jail, Jaipur ...	64,399 0 0	56,208 14 5	78 12 0	56,287 10 5	
4	Thana buildings at Amer, Chandwaji, &c. ...	9,113 0 0	9,032 5 3	178 14 9	9,211 4 0	
5	Do. Gangapore ...	2,314 0 0	2,309 14 0	.....	2,309 14 0	
6	Jail building at Hindown ...	23,080 0 0	21,377 0 6	46 15 4	21,423 15 10	
7	Male and female hawalats at police station, Mandawar ...	1,041 0 0	891 1 8	5 7 8	896 9 4	
8	Jail building at Gangapore ...	4,765 0 0	5,028 12 6	14 7 8	5,014 4 10	
9	Thana buildings at Bhurkey, Khandela, &c. ...	7,494 0 0	6,972 6 2	14 8 3	6,986 14 5	
10	Pucca Tribana in mile 14 of Mandawar and Karowli Road ...	391 0 0	240 7 5	125 7 0	365 14 5	
11	Rest-houses in the Western district ...	.....	698 1 5	.....	850 10 8	
12	Hindown Post Office pucca verandah, with slab roof instead of thatched one ...	610 0 0	505 14 0	9 11 11	515 9 11	
13	Thana buildings in Shaikhawati ...	17,218 0 0	469 7 9	4,611 13 8	5,081 5 5	
14	Additions to the Superintending Engineer's Drawing Office ...	1,866 0 0	1,467 14 8	562 13 1	2,030 11 9	
15	New pucca house for khansama of Hindown rest-houses ...	391 0 0	95 11 6	97 3 5	192 14 11	

16	Constructing a barrack at new jail, Jaipur	...	8,080	0	0	204	11	5	6,044	14	2	6,249	9	7
17	Jail building at Hindown, supplying dammer with peepus	...	27	5	6	.....			25	8	0	25	8	0
18	Old jail, Jaipur, upper story barrack for accommodation of 70 prisoners	...	8,242	0	0	4,876	10	7	3,491	11	8	8,368	6	3
19	Making a kotri close to quarter guard at Jaipur Transport Corps	...	310	0	0	.....			308	3	11	308	3	11
20	Making a corrugated sheet verandah in front of Raj bullockmen's quarters at the Superintending Engineer's bungalow	...	186	0	0	.....			147	2	6	147	2	6
21	Making Katla floor under saiban at Customs houses at Dhankin, Jatwara and Jagatpura	...	300	0	0	.....			142	12	2	142	12	2
22	Constructing a new godown at Chowki Mhova	...	451	0	0	.....			383	10	9	383	10	9
			.....			1,31,703	4	5	17,625	11	1	1,49,314	7	10
			.....			—1,000	0	0	—65	13	0	—1,051	5	4
	Total	...	.....			1,30,703	4	5	17,559	14	1	1,48,263	2	6
ORIGINAL WORKS, COMMUNICATIONS.														
1	Fair weather road from Gangapore to Bharoti	...	13,763	0	0	8,601	10	10	734	15	7	9,336	10	5
2	Pucca road to connect Chaksu station with the main Jaipur-Tonk road.	...	8,405	0	0	4,226	6	3	198	0	6	4,424	6	9
3	Pucca link road from Amargarh quarries up to Ghat Road.	...	1,759	0	0	1,353	9	10	220	13	8	1,574	7	6
4	Road from Naraina to Malpura.	...	19,069	0	0	16,253	4	1	767	13	11	17,021	2	0
5	Do. Kothoon to Lalsote.	...	11,962	0	0	8,816	14	7	1,166	12	3	9,982	10	10
6	Road and ramp in Sanganier river.	...	1,339	0	0	1,254	3	2	5	8	7	1,259	11	9
7	Kunkur road from Gangori Bazar to Nahargarh Road for Mistri Khana.	...	1,677	0	0	1,131	2	3	32	8	3	1,163	10	6
8	Road from Jhir station to Agra Road	...	1,713	6	0	150	14	3	...			150	14	3
9	Do. Bassi do.	...	.....			4	8	6	437	9	3	442	1	9
10	New road from Amer Chauk to Madhobilas.	...	37,541	0	0	32,163	14	1	10	10	5	32,174	8	6
	Carried over	...	...			73,955	7	10	3,574	12	5	77,530	4	3

## APPENDIX B—continued

Serial No.	Name of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	73,955 7 10	3,574 12 5	77,530 4 3	
11	Making a kunkur road 6 ft. wide from main road up to Kothiwar Hava Mahal stable.	90 10 8	.....	80 12 5	80 12 5	
12	Raj Mahal Malpura Road.	.....	.....	1,226 1 10	1,226 1 10	
13	Making a pucca road on cartway towards east to connect Jhir station road.	1,084 0 0	.....	113 11 9	113 11 9	
	Total	.....	73,955 7 10	4,995 6 5	78,950 14 3	
REPAIRS TO COMMUNICATIONS.						
1	Gangapore fair weather road.	21,493 0 0	10,547 8 10	832 6 10	11,379 15 8	
2	Deoli fair weather road.	4,614 0 0	3,254 14 11	74 15 0	3,329 13 11	
3	Deoli and Raj Mahal road.	2,715 0 0	1,206 6 3	256 9 6	1,462 15 9	
4	City and Camp Roads.	37,948 0 0	.....	25,916 3 5	25,916 3 5	
5	Jaipur-Tonk Road.	15,408 0 0	.....	29,177 4 3	29,177 4 3	
6	Agra Road.	12,208 0 0	.....	9,509 3 4	9,509 3 4	
7	Lalsote Road.	2,014 0 0	.....	4,554 9 10	4,554 9 10	
8	Ajmer Road.	11,331 0 0	.....	5,997 9 6	5,997 9 6	
9	Hindown Road to Karowli	8,039 0 0	.....	8,019 7 2	8,019 7 2	
10	Lanka Ghata Road	68 0 0	.....	67 15 9	67 15 9	
11	Repairing kutcha road from Sheodaspura to Chandlai.	559 0 0	91 2 0	79 9 0	170 11 0	

12	Raising west side wall at Agra Road, mile 3, from Poolunderjee's Garden up to Esur Rana's temple. ...	598	0	0	...	...	561	0	4	561	0	4		
13	Renewing pucca road from Madhogan j to Pandikui Station. ...	652	0	0	.....	.....	17	10	9	17	10	9		
14	Naraina and Malpura road, maintenance of ...	1,080	0	0	.....	.....	602	15	6	602	15	6		
15	Cutting rock of Lanka Ghata. ...	155	0	0	.....	.....	140	14	9	140	14	9		
16	Pucca culvert on Ajmer-Jaipur Road on way Mozabnd to Dhawari. ...	.....	.....	.....	.....	.....	255	9	3	255	9	3		
17	Repairing roads of two entrance gates at Buswa town. ...	391	0	0	.....	.....	376	8	8	376	8	8		
	Total	.....			15,100	0	0	86,440	8	10	1,01,540	8	10	
REPAIRS TO BUILDINGS.														
1	Works at Huthroi Kothi ...	2,53,255	14	0	2,55,859	8	3	{	1,469	6	3	2,57,328	14	6
2	Do. Mayo Hospital ...	48,927	6	0	37,662	14	1	{	—2,850	2	10	—2,850	2	10
3	Petty works at old Jail, Jaipur ...	5,008	14	10	4,723	3	4		9,515	3	4	47,178	1	5
4	Do. do. Natani ka Bagh ...	4,595	1	8	4,760	0	4		340	5	11	5,063	9	3
5	Repairs, &c., to Albert Hall and works for Museum ...	1,690	0	0	2,153	9	5		493	3	2	5,253	3	6
6	Repairs to district dispensaries ...	5,465	0	3	4,057	12	9	{	500	5	8	2,653	15	1
7	Quarters occupied by the Residency office establishment ...	6,609	0	0	3,972	10	1		—882	9	6	—882	9	6
8	Petty works at new jail, Jaipur ...	872	3	11	878	0	4		1,366	10	9	5,424	7	6
9	Godown and quarters at Tori... ..	.....	.....	.....	1,445	13	11		1,137	5	7	5,109	15	8
10	Works at Mr. Stotherd, Executive Engineer's, bungalow	7,495	9	3	6,814	3	2		91	5	4	969	5	8
11	Agra Kothi, repairs to ...	719	13	4	204	9	4		48	0	3	1,493	14	2
12	Cemetery wall at Mhowa ...	145	0	0	85	15	11		614	2	7	7,428	5	9
13	Works at Band master's bungalow ...	376	0	0	4	14	9		462	11	8	667	5	0
14	Corrugated sheet covering, &c., at Jaipur dak bungalow,	767	12	9	672	5	8		.....	.....	.....	85	15	11
15	Dead-house at old jail, Jaipur (male and female wards) preparing cut stone table and erecting water tap, ...	263	0	0	239	15	10		366	0	6	370	15	3
16	Old jail, Jaipur, making corrugated sheet shed for durris	2,220	0	0	2,054	4	4		70	9	3	742	14	11
	Carried over	...			3,25,589	13	6		.....	.....	.....	239	15	10
									13	6	0	2,067	10	4
									16,488	12	3	3,42,078	9	9
									—3,732	12	4	—3,732	12	4

## APPENDIX B—continued.

Serial No.	Name of works.	Amount sanctioned.  Rs. a. p.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
			Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	3,25,589 13 6	16,488 12 3	3,42,078 9 9	
17	Putting barbed wire, &c., on kutcha compound wall at the Executive Engineer's bungalow	262 0 0	64 4 2	153 12 7	218 0 9	
18	Petty works at the Residency, Jaipur	1,350 11 9	4 8 6	1,303 13 10	1,308 6 4	
19	Raj House at Mount Abu	22 0 0	.....	22 0 0	22 0 0	
20	Jail building at Nimka Thana	253 0 0	.....	267 9 5	267 9 5	
21	Repairing mud walls of stable at the Superintending Engineer's bungalow	186 0 0	.....	64 0 6	64 0 6	
22	Making expanded metal and concrete roofing of out-houses at the Superintending Engineer's bungalow,	1,060 0 0	.....	1,189 6 1	1,189 6 1	
23	White and colour washing, &c., at Jaipur dak bungalow,	246 0 0	.....	244 11 11	244 11 11	
24	Whitewashing and repairing plaster of Sambhar Dispensary	309 8 0	...	169 4 3	169 4 3	
25	Chowki at Mhowa, repairs to...	141 0 0	.....	25 5 0	25 5 0	
26	Works at the Superintending Engineer's bungalow	.....	.....	723 9 5	723 9 5	
27	Whitewashing, &c., at Deoli Escort Lines at the Residency, Jaipur	.....	.....	63 3 8	63 3 8	
28	Muharrir's quarter at Mandawar	.....	.....	0 8 6	0 8 6	
29	Residency hospital	.....	.....	9 0 8	9 0 8	
			3,25,658 10 2	20,725 2 1	3,46,383 12 3	
				—3,732 12 4	—3,732 12 4	
	Total	.....	3,25,658 10 2	16,992 5 9	3,42,650 15 11	

## MISCELLANEOUS PUBLIC IMPROVEMENTS.

		1,49,743	15	4	1,34,708	0	1	7,714	12	1	1,42,422	12	2
1	City conservancy tramway maintenance ...												
2	Watering trees, Superintending Engineer's bungalow garden ...	9,803	12	1	7,891	9	1	1,180	11	4	9,072	4	5
3	Altering sand in the city tigers' cages ...	2,454	6	3	2,134	9	7	177	13	0	2,312	6	7
4	Poor house near the Mayo Hospital, Jaipur ...	4,236	15	3	3,949	10	0	346	3	0	4,295	13	0
5	Bund in ghat behind Seth Anant Ram's garden ...	2,510	0	0	1,879	1	0	5	10	4	1,884	11	4
6	Sinking a puuca well to the west side of new jail, Jaipur	3,573	0	0	3,651	12	0	—78	12	0	3,573	0	0
7	Mandawar Cotton Press petty works ...	4,167	0	0	915	4	0	943	14	1	1,859	2	1
8	Jaipur State Railway ...	...			{ 3,080	8	5	2,662	5	9	5,742	14	2
9	Rewari and Phalera Railway ...	16,827	2	6	{ —2,978	14	9	—2,640	8	3	—5,619	7	0
10	Executive Engineer's bungalow garden maintenance,	2,347	11	0	16,927	6	6	0	12	0	16,928	2	6
11	Cleansing the city of Jaipur ...	35,103	2	5	1,354	5	11	—101	0	0	—101	0	0
12	Cotton Press, Jaipur, petty works ...	...			34,511	15	8	622	0	0	1,976	10	1
13	Putting folding hinged stops to the City gates in place of stone blocks in the middle of road ...	120	0	0	5	5	4	6	0	10	34,518	0	6
14	Deepening seven wells in Toda Rai Singh district ...	1,825	0	0	125	1	6	—10	14	5	...		
15	City water-supply maintenance ...	50,964	4	8	1,097	8	6	—13	12	3	120	0	0
16	Ditto (works) ...	1,360	3	10	...			41	5	6	1,138	14	0
17	Agra Kothi maintenance ...	4,927	15	5	...			44,819	6	3	44,819	6	3
18	Katli inundation cut ...	25,102	0	0	...			1,973	9	8	1,973	9	8
19	Ram Neras Garden ...	61,809	6	4	17,957	12	3	2,054	2	5	2,054	2	5
20	Preparing nali in the streets of Basdeo and Bacho.o Lal, mahajans ...	...			...			7,987	1	0	25,944	13	3
21	Wells in the South-western District, Kaligh ...	3,548	5	9	—11	10	0	34,452	6	5	34,452	6	5
22	Filling trench outside of Pandit Jai Nathji Atal's field at the railway station, Jaipur ...	...			4,744	12	0	11	10	0	...	8	6
23	Works at plague observation camp ...	301	0	0	—17	0	0	4,187	12	6	8,932	8	6
24	Skylights in latrines and roof of barracks at hawalat faujdari ...	1,221	0	0	153	11	2	17	0	0	...	5	5
25	Clearing Jhalra well at Naraina ...	351	0	0	634	5	9	8	10	3	162	5	5
	Carried forward	...			26	8	9	427	10	9	1,062	0	6
		...			2,35,749	3	6	207	11	6	234	4	3
		...			—3,007	8	9	1,09,863	0	8	3,45,480	3	6
		...			...			—2,844	14	11	—5,720	7	0



## APPENDIX B—continued.

Serial. No.	Name of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1901.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	2,35,749 3 6	1,09,863 0 8	3,45,480 3 6	
26	Sinking corrugated sheet bachri in well near the crossing at Natani ka Bagh	252 0 0	—3,007 8 9	—2,844 14 11	—5,720 7 0	
27	Tonk-Deoli-Johazpur Railway	4,299 6 10	181 0 9	7 13 6	188 14 3	
28	Sinking corrugated sheet bachri in well, mohalla Khoomran, Choukri Topkhann Hazoori	217 0 0	4,211 14 1	87 8 9	4,299 6 10	
29	Poor house at Naya Sagur, Mozabad	7,492 7 9	188 14 3	2 11 0	191 9 3	
30	Repairing fence of date plantation near Waterworks	13 6 1	7,492 7 9	...	7,492 7 9	
31	Whitewashing and petty repairs to lunatic asylum	393 0 0	18 13 1	—5 7 0	...	
32	Clearing old baori near Chattri at Ganwar	100 0 0	337 4 10	3 5 7	340 10 5	
33	Repairing wire fencing of date trees and putting a gate	55 0 0	18 0 0	17 0 0	35 0 0	
34	Repairing fence of Bani Chandpole	191 14 0	...	54 14 1	54 14 1	
35	Sinking well at Jacobabad village below Tori Sagur	330 0 0	...	191 7 11	191 7 11	
36	Making a saucer drain near Poolunderjee's house, Chowkri Bishwasurji	...	210 9 6	34 9 0	275 2 6	
37	Thatching bungalow at Jinsi Tilungan	...	...	81 0 0	81 0 0	
38	Erecting tap at Hawali Nataniyan hawalat Kotwuli	...	...	—81 0 0	—81 0 0	
39	Sinking corrugated sheet bachri in well at Inspecting Bungalow compound at Jaipur Transport Corps	209 0 0	...	44 0 0	44 0 0	
40	Clearing well of Mahawatan	...	...	—44 0 0	—44 0 0	
41	Repairing syce's quarter at the stable for stallion at Hindown	29 0 0	...	33 12 5	33 12 5	
				—33 12 5	—33 12 5	
				171 11 8	171 11 8	
				2 11 0	2 11 0	
				—2 11 0	—2 11 0	
				23 5 0	23 5 0	

42	Racquet court at the Residency, Jaipur ...	3,398	0	0	...	2,320	13	11	2,320	13	11
43	Repairing rails and wagons at the garden house of Rao Bahadur Babu Kanti Chander Mookerji ...	4,554	3	4	...	1,992	14	2	1,992	14	2
44	Repairing fire pumps, &c., of the Municipal Committee, Jaipur ...	42	1	8	...	42	1	8	42	1	8
45	Pucca parapet wall to Baiji ki Baori at Ganwar ...	151	0	0	...	153	14	0	153	14	0
46	Constructing a receptacle for clearing water of temple Sri Sita Kanji, Rasta Nataniyan ...	...	...	...	...	24	0	0	24	0	0
47	Making steps in front of the house of Godhi, widow of Nathu Lal, Agarwal ...	...	...	...	...	24	0	0	24	0	0
48	Digging a drain for diverting water of Matajee's maidan in front of Transport Corps, Jaipur ...	...	...	...	...	11	8	0	11	8	0
49	Making a ramp in front of Nolia of Manna Lal and Ram Purbah, Johrees ...	56	9	9	...	11	8	0	11	8	0
50	Drystone pitching in Gandha Nullah near Sayad Valayat Ally's house ...	...	...	...	...	46	7	0	46	7	0
51	Making dry rubble stone floor in Gandha Nullah ...	550	8	4	...	12	0	0	12	0	0
52	Putting slabs on 14 drinking wells, pargana Toda Rai Singh ...	782	0	0	...	12	0	0	12	0	0
53	Project for increasing the supply of water to the city, Sinking corrugated sheet bachelri in well near Ram Narain Shamee's house ...	...	...	...	...	135	12	9	135	12	9
54	Constructing a well near Thana Harmaruli ...	...	...	...	...	530	12	8	530	12	8
55	Making a receptacle (khail, kotha) to well at Chakwara ...	50	0	0	...	135	12	9	135	12	9
56	Laying 4" pipe to connect the water of 2 wells at Water-works ...	605	0	0	...	530	12	8	530	12	8
57	Rubble stone strainer bund at Amanishah ...	15,000	0	0	...	135	12	9	135	12	9
58	Levelling from Chandpole to Ram Sagur ...	...	...	...	...	49	10	9	49	10	9
59	Glazed earthen pipes to purnala of water taps, &c., at the city kotwali ...	22	0	0	...	497	15	11	497	15	11
60	Deepening well at Rai Singhpura as per request of zemindars ...	100	0	0	...	4,774	2	2	4,774	2	2
61	Chore Baori on roadside, halfway between Toda and Raj Mahal ...	...	...	...	...	5	12	3	5	12	3
62	Carried forward	...	...	...	...	21	15	0	21	15	0
		...	...	...	...	87	5	0	87	5	0
		...	...	...	...	3	4	0	3	4	0
		...	...	...	...	2,49,750	6	9	2,49,750	6	9
		...	...	...	...	3,007	8	9	3,007	8	9
		...	...	...	...	1,21,653	13	9	1,21,653	13	9
		...	...	...	...	3,993	7	3	3,993	7	3
		...	...	...	...	3,70,332	10	11	3,70,332	10	11
		...	...	...	...	5,929	6	5	5,929	6	5

## APPENDIX B—continued.

Serial No.	Name of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward...	...	2,49,750 6 9 —3,007 8 9	1,21,653 13 9 —3,993 7 3	3,70,332 10 11 —5,929 6 5	
63	Repairing sweeper's well near the house of Rao Raja of Uniyara	...	50 8 2 —53 0 0	2 7 10	...	
64	Engraving names of graduates in the Maharaja's College, Jaipur	...	...	20 0 11	20 0 11	
65	Sinking corrugated sheet Bachri in well of Yakin Shah	...	...	179 8 10 75 12 6	179 8 10 75 12 6	
66	Rubble stone floor and khurra at city Lions' cages	186 0 0	...	...	...	
67	Making staircase of Punchaiti Temple in Jalsain Tank	141 0 0	...	486 11 3	486 11 3	
68	Lowering 2ft. and widening 10ft. supply cut Harmara Channel	...	...	22 10 3 10 7 7 5 12 0	22 10 3 10 7 7 5 12 0	
69	Clearing well at Nag Talai	246 0 0	...	...	...	
70	Maniac asylum well	17 0 0	...	...	...	
		...	2,49,800 14 11 —3,060 8 9	1,22,457 4 11 —3,993 7 3	3,71,133 10 3 —5,929 6 5	
	Total	...	2,46,740 6 2	1,18,463 13 8	3,65,204 3 10	



## APPENDIX B—continued.

Serial No.	Names of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	9,70,567 14 1	83,655 2 7 —482 11 3	10,53,802 4 8 —61 15 3	
23	Bund Jai Sagur at Toond making Core wall in the gap and repairs to inner slope	5,474 0 0	2,285 7 1	14 11 3 —40 10 9	2,300 2 4 —40 10 9	
24	Bund Thaonla raising 2 ft. H. W. L.	3,433 0 0	3,415 12 10	241 9 6	3,657 6 4	
25	Making a kutcha Bund to divert water of Naddi Bhoond into Moran Sagur	435 0 0	356 9 3	78 6 9	435 0 0	
26	Halolao Tank at Nivai	16,273 0 0	14,892 14 7	2,748 8 5	17,641 7 0	
27	New Bund Uttarna in Thikana Dooni	5,000 0 0	3,135 1 4	735 1 9	3,870 3 1	
28	Bund Kerli Sagur raising 2 ft. H. W. L.	4,883 0 0	4,673 5 8	411 13 0	5,085 3 2	
29	Do. near Hingonia	11,853 0 0	7,080 8 5	2,907 13 1	9,988 5 6	
30	Deepening well at Farhadpura below Chaparwara Sagur Canal	419 0 0	589 4 10	109 6 0	698 10 10	
31	New Bund at Gopipura near Panwar	1,499 0 0	981 5 0	331 6 0	1,312 11 0	
32	Famine Relief works contingencies	5,172 0 0	14,938 4 4	287 1 9	15,225 6 1	
33	Preparing two pucca sluices with dhora for irrigation of Gangolao tank	657 0 0	684 12 1	455 7 11	1,140 4 0	
34	Bund Nasrida Raising 3 ft. H. W. L.	9,915 0 0	9,192 4 1	3,281 6 3	12,473 10 4	
35	Widening 15 ft. Ganwar supply cut	15,000 0 0	20,176 2 0	80 12 1	20,256 14 1	
36	Bund Hoshapura, Tehsil Toda Rai Singh	8,385 0 0	5,934 8 8	2,028 7 4	7,963 0 0	
37	Chandlai supply cut from the Railway Bridge at Sanganiaer	...	11,178 0 10	3,268 7 6	14,446 8 4	
38	Repairs to Pall bund Panwar	1,041 0 0	3,293 12 6	85 11 9	3,379 8 3	

39	Repairs to District tanks	...	...	19,600	0	0	...	...	...	15,715	2	8	15,715	2	8
40	Tori Sagur	...	...	5,52,099	0	0	5,47,361	4	2	—5,735	15	11	—5,735	15	11
41	Abpashi establishment	...	...	22,714	0	0	...	...	...	104	7	3	5,47,465	11	5
42	Boochara tank repairs and maintenance	...	...	1,558	0	0	...	...	...	18,818	0	11	18,818	0	11
43	Tori Sagur clearing canals	...	...	1,500	0	0	...	...	...	1,234	14	10	1,234	14	10
44	Works on the South canal of Tori Sagur—a cart and two foot bridges over L. L. and ten mud walls and one pucca inlet for tank Ulyari	...	...	3,568	0	0	407	7	7	414	11	8	822	3	3
45	Repairs to and enlarging Gaonwai tank at Baguit	...	...	1,009	0	0	647	0	3	217	8	9	864	9	0
46	Sainthal Sagur	...	...	1,72,840	0	0	1,56,089	1	7	1,843	13	4	1,57,982	14	11
47	Tank Dawarapura or Karia	...	...	6,586	0	0	4,706	6	6	725	0	0	5,431	6	6
48	Extension of the River Mahashi—10 miles towards Tori Sagur	...	...	26,180	0	0	8,796	2	11	2,067	1	8	10,863	4	7
49	Gangapur sub-division establishment	...	...	396	0	0	...	...	...	356	4	0	356	4	0
50	Bhairon Sagur at Chandsen	...	...	81,607	0	0	58,620	5	0	26,752	3	1	85,372	8	1
51	Chaparwara Sagur clearing canals	...	...	2,000	0	0	...	...	...	2,065	13	1	2,065	13	1
52	Digging a canal from the River Mahashi to Chapurwara Sagur	...	...	25,000	0	0	17,706	4	3	5,934	13	11	23,641	2	2
53	Repairing Bhairon Sagur at Thalli	...	...	2,112	0	0	1,414	0	5	940	10	0	2,354	10	5
54	Sanganier Anicut silt clearance	...	...	100	0	0	...	...	...	66	0	0	66	0	0
55	Clearing silt and repairing channels Bund Neota and Palri	...	...	500	0	0	...	...	...	269	5	3	269	5	3
56	Leewali Tank establishment	...	...	276	0	0	...	...	...	299	0	0	299	0	0
57	Moran Sagur Tank do.	...	...	564	0	0	...	...	...	572	0	0	572	0	0
58	Ramgarh sub-Division do.	...	...	378	0	0	...	...	...	318	0	0	318	0	0
59	Boochara do.	...	...	1,194	0	0	...	...	...	1,194	0	0	1,194	0	0
60	Western District Tanks do.	...	...	3,438	0	0	...	...	...	3,546	12	9	3,546	12	9
61	Moharrirs for guarding tanks in the western district	...	...	1,320	0	0	...	...	...	1,111	0	9	1,111	0	9
62	Ghat Bhundari tank establishment	...	...	300	0	0	...	...	...	300	0	0	300	0	0
63	Bund Sheodoongri near Chaksu	...	...	65,465	0	0	38,576	1	7	4,760	6	4	43,336	7	11
64	Repairs to tank Jalsain at Hindown	...	...	14,059	0	0	6,353	4	7	1,865	11	1	8,218	15	8
65	Tank Datoli, near Madhorajpura	...	...	3,297	0	0	1,063	6	1	2	4	0	1,065	10	1
66	Kishunpura village tank, repairs and extension	...	...	962	0	0	1,326	11	11	(—27	9	4)	(—27	9	4)
	Carried over	...	...	...	...	...	19,16,443	8	5	1,94,805	12	7	21,10,828	9	0
		...	...	...	...	...	—6,286	15	3	—6,286	15	3	5,866	3	3

## APPENDIX B—continued

Serial No.	Name of works.	Amount sanctioned. Rs. a. p.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	19,16,443 8 5	1,94,805 12 7 —6,286 15 3	21,10,828 9 0 —5,866 3 3	
67	Pucca Core wall in kutchra Pall of Bund Sawantgarh near Punwar ...	6,924 0 0	5,953 5 9	1,666 2 3	7,619 8 0	
68	Raising 3 ft. Bund Sainthal Sagur ...	13,434 0 0	6,749 5 4	2,936 6 8	9,685 12 0	
69	Bund Chandlai, repairs to, and Canals ...	2,152 0 0	1,535 14 6	221 8 3	1,757 6 9	
70	Tank Mandi ...	3,042 0 0	2,640 15 2	392 4 2	5,033 3 4	
71	Silt clearance of Chandlai channel ...	50 0 0	...	33 14 9	33 14 9	
72	Repairing and raising Pall of Bund Bainra ...	2,574 0 0	1,537 7 0	600 10 1	2,138 1 1	
73	Lengthening 100 ft. masonry wall of waste weir of Ram Sagur at Malarna Chore ...	422 0 0	12 12 2	279 11 2	292 7 4	
74	Tank Rampura, made up of 2 Nadas between Jhoonpari Tank and Bharni Nadi ...	2,500 0 0	1,217 11 6	106 4 6	1,324 0 0	
75	Repairing Tank Bariwala (Baniyawala) at Kasba Oodai Kalan, pargana Vazirpur ...	5,909 0 0	1,089 11 2	2,317 10 4	3,407 5 6	
76	Repairs to Bund Moti Sagur at Gnonwari ...	5,659 0 0	1,431 4 7	2,507 14 1	3,939 2 8	
77	Bridge over 4th Branch of Morán Sagur near Torra Choru Sagur ...	272 0 0	150 15 3	118 0 5	268 15 8	
78	Bridge over Johriwala supply cut in mile 10 of Ganga-pore and Vazirpur Road ...	18,680 0 0	6,918 15 4	9,852 0 2	16,770 15 6	
79	Repairing patri of Akheypura Branch from Kaligh Sagur Canal ...	1,254 0 0	283 9 8	236 9 3	520 2 11	
80	Tank Pichula ...	3,610 0 0	2,441 8 2	744 0 4	3,185 8 6	
81	" Gobindi, Tehsil Phagi ...	3,028 0 0	2,067 1 9	614 15 4	2,682 1 1	
82	Silt clearance of Bishun Samund supply cut	1,501 0 0	1,789 13 10	816 8 7	2,606 6 5	
83		2,782 0 0	1,133 14 6	828 7 3	1,962 5 9	

84	Repairing and increasing pail and adding a sluice Bund Bagri or Nonaria. ...	3,836	0	0	2,003	5	6	1,501	0	10	3,504	6	4
85	Repairs to old Bund Bantiali near Lamba Bara ...	8,593	0	0	2,495	0	8	58	5	11	2,553	6	7
86	Raising 3 ft. H. W. L. or 5 ft. Pall Tank Kote Banaor, ...	12,241	0	0	1,896	15	9	104	14	9	2,001	14	6
87	Kaligh Sagur canal repairing Bridges ...	23	0	0	3	3	9	17	9	9	20	13	6
88	Repairs to Gaonwai Tank at Kohara village ...	5,101	0	0	1,010	5	8	3,332	15	4	4,943	5	0
89	Raising 3 ft. Bund Chandni ...	12,880	0	0	2,968	10	5	1,733	1	0	4,701	11	5
90	Two Tanks at Chakwara, Bodia and Dholai ...	3,222	0	0	1,641	3	8	1,458	2	9	3,099	6	5
91	Raising 2 ft. Pall Bund Rabaota ...	5,583	0	0	1,664	14	6	1,669	13	10	3,334	12	4
92	New Tank at Baragaon, Pargana Mohwa ...	13,283	0	0	5,422	10	4	5,941	14	4	11,364	8	8
93	Repairing Bund Nainwari tehsil Bonli ...	2,455	0	0	1,656	12	8	243	13	2	1,900	9	10
94	Clearing and widening canals of Dhibolno Tank ...	1,770	0	0	669	0	9	79	6	9	748	7	6
95	Repairs to Dhehra Tank at Malarna Chore ...	2,225	0	0	1,164	11	4	193	11	0	1,358	6	4
96	Futteh Sagur Sluices ...	759	0	0	67	14	0	274	4	3	342	2	3
97	Repairing a fall over Matwali Canal near Old Thana at Sanganier ...	206	0	0	162	14	0	43	2	0	206	0	0
98	Digging a canal from Leewali Canal to Tajawala Tank, ...	193	0	0	82	0	0	43	0	6	125	0	6
99	Pucca Core wall in Ghooria Tank at Liwali ...	4,618	0	0	20	6	3	72	5	4	92	11	7
100	Clearing and repairing Indokhia and Kohara branches of Tori Sagur H. L. South Canal ...	660	0	0	634	12	9	7	10	3	642	7	0
101	Pucca culvert over irrigation channel of Bhambola Tank at Gunwar ...	69	0	0	48	1	9	5	2	9	53	4	6
102	Repairs to Tank Nazimwala at Bamniwas ...	902	0	0	596	15	4	285	12	0	882	11	4
103	Digging a new channel from 4th branch Mora Sagur to Bamniwas ...	683	0	0	65	0	9	21	5	0	516	13	0
104	New Bund Uttarsagar at Binori ...	6,000	0	0	619	9	11	430	7	3	670	13	5
105	Repairing and clearing Chaparwara Sagur L. L. South Canal ...	1,014	0	0	80	13	6	594	10	9	675	8	3
106	Repairs to Pall Tank Nasbota ...	263	0	0	215	8	3	17	0	9	232	9	0
107	Mozabad Sub-division Establishment ...	3,636	0	0	...	...	...	3,034	14	6	3,034	14	6
108	Clearing Kaligh Sagur Canals ...	1,000	0	0	...	...	...	1,257	1	11	1,257	1	11
109	Bund Barial (small) Pergannah Buswa ...	2,646	0	0	1,385	12	3	1,049	5	8	2,435	1	11
110	Silt clearance of Raysur Main Canal ...	200	0	0	...	...	...	179	7	8	179	7	8
111	Do. of Rayawala do. ...	25	0	0	...	...	...	27	10	2	27	10	2
	Carried over	...			19,79,974	9	10	2,43,408	1	10	22,22,961	15	8
					...	...	...	—6,311	7	0	—5,890	11	0



## APPENDIX B—continued.

Serial No.	Name of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	19,79,974 9 10	2,43,408 1 10	22,22,961 15 8	
112	Silt clearance and repairs to canals at Sanganier	500 0 0	...	—6,311 7 0	—5,890 11 0	
113	Repairs to Bum Talao at Malpura	1,305 0 0	...	266 13 0	266 13 0	
114	Sinking well for Naim Dass, Poojari, Temple Sri Sita Ramji at Ghat Bhundari	190 0 0	1,281 3 3	0 6 0	1,281 9 3	
115	Bund Ram Sagur at Chorui, repairs to pull and pucca sluice	395 0 0	181 0 0	4 13 0	189 6 0	
116	Pointing stone joints and resetting coping on Tori-Sagur parapet coping on Core wall	106 0 0	277 0 0	420 6 1	697 6 1	
117	Chaparwana Sagur repairing and clearing H. I. South Canal	550 0 0	...	1 6 0	1 6 0	
118	Bund Modhpura	...	303 0 3	130 5 2	493 5 5	
119	Pucca Weir on the River Mahashvi for the South Canal of Chaparwana Sagur near Kheri	...	...	8 11 9	8 11 9	
120	Repairs to Bridge over Neota Supply Cut near Dhani Khoomara	8,033 0 0	...	—9 8 0	—9 8 0	
121	Agar Sagur, tehsil Mozabad	755 0 0	...	4,508 1 9	4,508 1 9	
122	Raising Binori and Deccan Sagur	3,319 0 0	...	1 0 0	1 0 0	
123	Making new wing walls and raising walls of Aqueduct No. 19, over Nala East Canal Madho Sagur	3,927 0 0	...	1,404 1 2	1,404 1 2	
124	Making a sluice in 7th branch, Moran Sagur	506 0 0	...	1,420 15 9	1,420 15 9	
125	Completing masonry Core wall Tank Kerli	212 0 0	...	491 7 10	491 7 10	
126	Do. do. Banaria	9,490 0 0	...	18 5 6	18 5 6	
		5,500 0 0	...	1,462 4 2	1,462 4 2	
			...	1,742 0 1	1,742 0 1	

[illegible]

## APPENDIX B—concluded.

Serial No.	Name of works.	Amount sanctioned.	EXPENDITURE.			REMARKS.
			Amount expended up to 31st December 1900.	Amount expended from 1st January to 31st December 1901.	Total.	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward	...	19,86,483 10 9	2,60,723 10 10 —6,834 9 2	22,46,272 15 5 —6,900 3 0	
149	Tank Futteh Sagur. Pucca Core wall and repairs to	...	—23 4 0	23 4 0	...	
150	Pall for convenience of public	4,518 0 0	4,218 2 4	269 13 8	4,518 0 0	
151	Tank Dhamana, pargana Phagi, tehsil Mozabad	365 0 0	281 1 10	83 14 2	365 0 0	
152	Supply Cut Bund Madho Singhpura	264 0 0	...	108 4 3	108 4 3	
153	Clearing Supply Cut Bund Kote	3,567 0 0	...	12 12 6	12 12 6	
154	Necessary works on Bund Thaola	...	...	...	...	
	Do. Ram Sagur, Lamba Hari	...	...	...	...	
155	Singh	...	...	6 5 3	6 5 3	
156	Tori Sagur Stock Account	...	...	9 9 3	9 9 3	
	Providing Jhirri stone and wooden planks to doors of	...	...	—7 10 6	—7 10 6	
157	Waste Weir of Ghata No. 1, Moran Sagur	144 0 0	...	119 2 2	119 2 2	
158	Pucca sluice for Nazimwala Tank at Bamaniyawas	293 0 0	...	27 6 9	27 6 9	
	Making a kunkur Khoorah in Mile 9, Kaligh Sagur	...	...	...	...	
159	Canal	118 0 0	...	37 14 0	37 14 0	
	Setting iron sluice in Kala Talao at Jacobpura in	...	...	...	...	
160	place of Datadar	232 0 0	...	109 10 6	109 10 6	
161	Wooden shutters for Moran Sagur Canal	18 0 0	...	16 1 6	16 1 6	
	Making a pucca sluice from Leewali Canal for filling	...	...	...	...	
162	water in Tajawala Tank	90 0 0	...	37 15 7	37 15 7	
163	Silt clearance of Tank Madhorajpura Duets	132 0 0	...	27 11 6	27 11 6	
164	Digging a canal from Hingonia to Gobindi	2,000 0 0	...	1,382 10 2	1,382 10 2	
165	Escape Chaparwara Sagur to fill Choru Sagur	...	...	0 4 3	0 4 3	
	Repairing Sluice No. 1, Moran Sagur	32 0 0	...	31 3 9	31 3 9	

166	Preparing 4 well ducts over Kaligh Sagur Canal to carry well water across the Canal ...	713	0	0	480	5	1	-39	0	9	441	4	4
167	Kaligh Sagur Canal necessary pucca works ...	3,759	0	0	2,933	12	4	-26	9	3	2,907	3	1
168	Repairs to Amanishah Supply Cut ...	50	0	0	...	...	...	10	5	3	10	5	3
169	Repairing and enlarging Kala Talao near Gobindti Tank Dhamalia, tehsil Malpura ...	2,000	0	0	...	...	...	0	13	0	0	13	0
170	Chaparwara Sagur Canal. Erecting sluice gate with counterpoise weights over head pulley ...	934	0	0	...	...	...	0	11	1	0	11	1
171		...			...			55	9	3	55	9	3
					19,94,427	0	4	2,63,095	0	8	22,56,498	12	10
					-23	4	0	-6,907	13	8	-5,907	13	6
	Total	...			19,94,403	12	4	2,56,187	3	0	22,50,590	15	4

# APPENDIX C.

STATEMENT of Roads and Lines of Communications in the Jaipur State for the year 1901.

Name of Roads.	LENGTH IN MILES.		Annual cost of maintenance.	Extensions, if any.	Average cost of making a new road per mile.	Average cost of maintenance.	REMARKS.
	Mettled.	Unmettled.					
In the City and Environs	47.31	...	Rs. a. p.				
Dosa via Lalsote to River Chambal	15.	67½	26,822 0 6				
Agra Road including Naila Section and a branch to Mohwa Dispensary	81.16	...	4,554 9 10				
Jhir Station Road, R. M. R.	0.47	...	9,735 12 7				
Jatwara do.	0.54	...	...				
Ajmer Road	52.	...	...				
Jaipur to Tonk Border and a link road in the bed of Sangar River	47.61	...	6,253 2 9				
Jagatpura Road	2.79	...	29,182 12 10				
Sheodaspura Station Road	0.45	...	...				
Chakan do.	2.59	...	...				
Mandawar and Karowli Road	43.	...	8,019 7 2				
Hindown and Gangapore Road	...	24	...				
Gangapore and Lalsote Road	...	26	832 6 10				
Deoli Road (Jaipur Section)	...	16	74 15 0				
Raj Mahal and Deoli branch	8.	...	236 9 6				
Gangapore to Bharoti Road	...	27	...				
Kothoon to Lalsote Road	...	25	...				
Naratna to Malpura Road	...	38½	602 15 6				
Total	300.92	224.13	86,334 12 6	...	...	286.89	
					The average cost of a new road 36 ft. wide, centre 12 ft. metalled with kunkur 9 inches thick, is Rs.3,000.	The total cost of maintenance divided by total number of miles metalled only.	With the exception of roads in the city of Jaipur, which are from 50 to 100 ft. wide, metalled and paved on each side, all the roads are 36 ft. wide; the centre 12 ft. metalled with kunkur and the nullahs are mostly unbridged.

# APPENDIX D.

STATEMENT of Imperial works executed during the year ending 31st December 1901.

Name of work.	Amount sanctioned.	Amount expended up to 31st December 1900.	Amount expended up to 31st December 1901.	Total.	REMARKS.
Mohva Post Office. Fixing iron bar junglas in the 5 windows ... ..	Rs. a. p. 117 0 0	Rs. a. p. ...	Rs. a. p. 80 13 6	Rs. a. p. 80 13 6	Estimate for Rs.117 sanctioned by the Superintending Engineer, Rajputana circle, vide his letter No. 5216-R., dated 10th November 1900.
Repairs to Government Hospital, Jaipur ... ..	158 0 0	...	...	...	<i>Sanctioned</i> Estimate for Rs.158 by the Superintending Engineer, Rajputana circle, vide his letter No. 548-R., dated 9th December 1901.
Contingencies (Postage stamps) ... ..	...	...	3 8 6	3 8 6	Letter No. 1181, dated 16th May 1893, from the Examiner, P. W. Accounts, Rajputana and Central India.
Total ... ..	275 0 0	...	84 6 0	84 6 0	

## STATEMENT of Irrigation for the Raj year ending 31st August 1901, (Sambat 1957)

No.	Name of work.	OUTLAY.			High water level	Water, if any, from previous year.	Height of water last rains.
		Expenditure up to last year	Expenditure during the year.	Total.			
		Rs. a p	Rs. a p	Rs. a p	Ft. in.	Ft. in.	Ft. in.
1	Bhao Sagur ...	40,324 0 2	...	40,422 8 2	14 0	...	3 6
2	Ram Sagur ...				50 0	...	3 0
3	Bund Talao ...				8 0	...	...
4	Man Sagur ...				30 0	...	0 11
5	Khonagore ...	2,603 14 11	25 0 3	2,628 15 2	12 0	...	5 0
6	Koonthara ...	10,615 8 6	...	10,615 8 6	9 0	...	...
7	Neota Bund, Ram Sagur ...	1,93,568 120	425 9 3	1,93,994 5 3	16 0	...	6 9
8	Chandlai ...	93,330 8 3	2,020 14 0	95,351 6 3	10 0	...	7 0
9	Banganga Weir and Canal ...	69,403 13 3	...	69,403 13 3	...	...	...
10	Berasina ...	16,431 2 9	...	16,431 2 9	...	...	...
11	Raiola ...	24,735 10 6	40 11 9	24,776 6 3	21 0	...	21 0
12	Bund Raisar Khur ...	1,15,793 15 11	815 15 10	1,16,609 15 9	40 0	...	25 6
13	Jetpura Tank ...	6,972 10 10	...	6,972 10 10	8 0	...	...
14	Benekhar ...	2,926 14 0	...	2,926 14 0	8 0	...	...
15	Bandolao ...	14,910 9 11	206 8 6	15,117 2 5	8 0	...	1 6
16	Bhaosa ...	2,521 12 1	0 10 0	2,522 6 1	8 0	...	...
17	Dhobolao Nirana ...	51,252 12 5	145 6 0	51,398 2 5	12 0	...	5 6
18	Kala Talao ...	5,224 13 7	77 1 7	5,301 15 2	8 6	...	4 0
19	Bhora-ka-Dand ...	3,023 6 3	26 0 6	3,049 6 9	9 0	...	1 3
20	Naya Sagur, Mozabad ...	17,595 12 0	18 0 0	17,613 12 0	13 0	...	4 0
21	Bankia Churu ...	5,538 0 2	...	5,538 0 2	6 6	...	2 3
22	Ram Sagur Churu ...	5,346 14 7	582 12 10	5,929 11 5	5 0	...	...
23	Kagia Phagi ...	3,234 13 2	2 11 0	3,237 8 2	6 0	...	...
24	Kanolao Phagi ...	9,503 14 2	9 11 9	9,513 9 11	5 0	...	...
25	Ram Sagur Phagi ...	4,508 6 7	10 1 6	4,518 8 1	5 0	...	1 0
26	Bujeali Phagi ...	13,715 9 6	57 3 3	13,772 12 9	9 0	...	2 0
27	Teelolao Phagi ...	11,031 11 1	30 11 9	11,062 6 10	5 0	...	...
28	Ram Sagur Madhorajpura ...	7,017 13 10	76 2 6	7,094 0 4	6 0	...	...
29	Nimla P. Weir ...	8,526 10 5	6 9 4	8,533 3 9	15 0	...	12 3
30	Kaligh. Sagur ...	2,79,447 8 9	1,814 13 8	2,81,262 6 5	26 0	...	9 9
31	Lambia Chaksu ...	3,697 11 4	5 8 6	3,703 3 10	10 0	...	4 0
32	Ram Sagur Ganor ...	1,26,215 6 6	431 9 4	1,26,646 15 10	11 0	...	3 0
	Carried over ...	11,49,020 9 5	6,928 5 1	11,55,948 14 6	...	...	...

## DIX E.

received from the Durbar, showing the Outlay by the Engineer and the Returns.

RETURNS FOR THE YEAR.					Percentage on Outlay	Total amount realized up to end of August 1901.	No.
No. of bighas irrigated.	Amount of water rate.	Amount of share of produce.	Miscellaneous.	Total.			
Big. bis	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
...	...	...	...	...	6.33	53,128 5 6	1
624 7	859 8 6	1,116 5 6	53 14 0	2,029 12 0			2
4 0	4 0 0	8 0 0	...	12 0 0			3
150 11	214 15 6	296 9 0	9 4 6	520 13 0			4
77 16	61 12 9	125 4 0	13 0 0	200 0 9	7.60	1,727 12 3	5
...	...	...	...	...	...	4,281 14 6	6
1,368 9	1,623 6 9	2,862 5 3	51 4 0	4,537 0 0	2.33	1,09,732 12 3	7
1,057 14	612 14 9	2,211 12 3	18 14 0	2,843 9 0	2.98	1,25,476 7 6	8
1,752 14	1,588 12 6	1,751 14 9	372 10 6	3,713 5 9	5.34	52,425 1 0	9
...	...	...	...	...	...	4,080 10 0	10
402 1	306 1 9	402 0 9	231 14 6	943 1 0	3.80	18,102 0 9	11
2,608 8	2,228 15 0	2,608 6 3	303 8 0	5,230 13 3	4.48	1,40,829 5 0	12
20 4	10 3 6	40 6 0	...	50 9 6	0.73	9,286 9 6	13
...	...	...	...	...	...	1,257 2 3	14
262 12	169 3 6	488 0 0	6 2 0	663 5 6	4.38	7,216 11 9	15
3 4	0 12 9	6 0 0	19 5 6	26 2 3	1.03	1,287 0 0	16
614 7	381 14 6	1,004 0 0	56 10 0	1,445 8 6	2.81	38,082 2 3	17
118 16	56 4 6	232 0 0	1 14 0	290 2 6	5.46	4,533 10 0	18
90 7	45 3 0	164 12 0	...	209 15 0	6.23	5,746 13 9	19
840 17	671 2 6	1,672 8 0	28 5 0	2,371 15 6	13.46	95,671 2 0	20
746 6	686 6 0	872 5 9	0 12 0	1,561 7 9	28.18	20,402 2 3	21
1,009 5	543 10 6	1,357 8 6	12 13 0	1,914 0 0	32.27	11,768 2 6	22
13 14	8 15 0	...	1 8 0	10 7 0	0.30	3,013 3 3	23
881 6	387 6 9	1,055 2 6	...	1,442 9 3	15.16	30,773 12 6	24
1,511 11	169 3 0	1,753 5 0	29 11 9	1,952 3 9	43.22	20,328 7 6	25
385 3	277 8 0	475 14 6	23 0 0	776 6 6	5.63	16,013 4 3	26
44 5	23 8 9	46 0 0	21 6 3	90 15 0	0.82	13,321 0 9	27
...	...	...	...	...	...	10,210 1 6	28
...	50 0 0	...	3 12 0	53 12 0	0.63	1,198 7 6	29
8,178 15	6,772 9 0	15,314 1 0	326 2 3	22,442 12 3	7.97	6,28,586 2 0	30
32 5	16 10 3	250 11 6	2 4 0	269 9 9	7.28	15,528 15 0	31
2,025 7	1,156 7 6	4,050 11 9	104 15 9	5,312 3 0	4.19	40,252 0 0	32
24,824 4	18,932 8 6	40,196 0 3	1,785 15 0	60,914 7 9	...	14,84,283 3 3	



No.	Name of work.	OUTLAY.			High Water level.	Water, if any, from previous year.	Hoi of w l
		Expenditure up to last year.	Expenditure during the year.	Total.			
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Ft. in.	Ft. in.	Ft.
	Brought forward	11,49,020 9 5	6,928 5 1	11,55,948 14 6	...	...	..
33	Bhambolao Ganor ...	9,649 2 8	109 2 9	9,758 5 5	8 0	...	4
34	Lamba Large Hari Singh	55,751 6 10	83 5 0	55,834 11 10	15 0	1 0	4
35	Borara Ram Singhpoora	4,246 15 10	5 2 0	4,252 1 10	6 0	...	3
36	Nasrida Bund ...	26,494 1 1	3,358 15 9	29,853 0 10	10 0	...	8
37	Subhdand Sinodia...	6,766 15 7	15 9 6	6,782 9 1	10 0	...	4
38	Khedolao ...	5,042 4 4	17 6 0	5,059 10 4	6 0	...	4
39	Gangalao Toda Rai Singh	9,586 6 6	463 9 11	10,050 0 5	10 0	...	6
40	Karoria ...	3,460 14 2	17 3 3	3,487 1 5	18 0	...	10
41	Rathoria ...	2,408 14 1	22 10 6	2,426 8 7	10 0	...	5
42	Sandla... ..	15,305 0 3	75 1 9	15,380 2 0	10 0	...	1
43	Morla Sriram Nagur	9,023 8 0	...	9,023 8 0	7 0	...	1
44	Bala Sagur Kankarwall	2,912 10 2	...	2,912 10 2	7 0	...	3
45	Beebolao Bas Ganethi	3,504 11 5	3 4 6	3,507 15 11	7 0	...	2
46	Saitiwas ...	6,438 12 7	...	6,438 12 7	12 0	...	9
47	Thaola ...	37,803 0 9	429 4 9	38,237 5 6	11 0	2 9	6
48	Panwar... ..	83,505 2 8	760 2 6	84,265 5 2	14 0	6 0	5
49	Tori Sagur ..	6,03,268 14 0	6,695 2 2	6,09,964 0 2	30 0	15 6	6
50	Kirnal Sagur ...	1,02,589 14 0	257 5 9	1,02,847 3 9	14 0	...	4
51	Bhambolao Toda Rai Singh	541 7 0	...	541 7 0	6 0	...	3
52	Jharana ..	1,945 15 0	38 6 6	1,984 5 6	7 0	...	...
53	Dangurthul ...	11,474 7 2	...	11,474 7 2	...	...	...
54	Rawatwala Chaksu	11,838 6 9	49 1 1	11,887 7 10	11 6	...	7
55	Gaitolao ...	5,214 14 4	609 10 4	5,824 8 8	7 0	...	4
56	Namolao Bara ...	1,633 15 10	...	1,633 15 10	6 0	...	6
57	Do. Chota ...	958 9 6	...	958 9 6	6 0	...	...
58	Bijey Sagur Baswa	11,395 10 4	176 2 11	11,571 13 3	8 0	...	7
59	Koond Moran ...	1,476 5 0	82 3 4	1,558 8 4	...	...	...
60	Roop Sagur Shendoli	21,677 5 8	171 14 6	21,849 4 2	16 0	...	6
61	Madho Sagur Gerowly	1,90,735 4 3	10,48 4 3	1,91,783 8 6	30 0	...	22
62	Moran Sagur ..	1,68,272 12 3	2,716 8 4	1,70,988 15 7	17 0	...	16
63	Kot Hindown ..	20,394 7 5	237 4 11	20,631 12 4	5 6	...	3
64	Horla ...	4,708 14 1	85 14 9	4,794 12 10	5 0	...	...
	Carried over	25,89,056 10 11	24,456 13 1	26,13,513 8 0	...	...	...

## DIX E—(continued).

RETURNS FOR THE YEAR.					Percentage on Outlay.	Total amount realized up to end of August 1901.	No.
No. of big has irrigated.	Amount of water-rate.	Amount of share of produce.	Miscellaneous.	Total.			
Big bis	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
24,824 4	18,032 8 6	40,196 0 3	1,785 15 0	60,914 7 9	...	14,84,383 3 3	32
228 1	118 10 6	456 1 9	46 0 0	620 12 3	6.36	15,734 12 6	33
1,244 4	980 15 9	2,488 7 0	12 12 0	3,482 2 9	6.23	75,722 8 9	34
294 15	147 6 3	589 8 6	...	736 14 9	1.73	5,938 10 9	35
326 1	187 3 9	135 12 9	5 8 9	328 9 3	1.10	22,847 0 3	36
365 4	183 0 3	1,008 8 0	1 0 0	1,192 8 3	17.58	6,722 10 9	37
202 12	110 12 0	452 12 6	...	563 8 6	11.14	4,832 15 0	38
69 16	39 3 3	129 0 0	...	168 3 3	1.67	3,016 7 9	39
...	...	...	...	...	...	2,760 14 0	40
59 7	81 0 9	200 0 0	0 8 0	231 8 9	9.55	4,727 6 9	41
659 8	370 14 0	1,141 8 0	3 0 0	1,515 6 0	9.08	18,376 2 9	42
...	...	...	...	...	...	5,014 8 9	43
53 11	25 2 6	375 0 0	1 4 0	401 6 6	13.76	4,197 10 6	44
195 17	109 5 6	562 5 3	6 5 0	677 15 9	19.32	6,772 2 6	45
71 8	46 15 9	67 0 0	7 0 0	120 15 9	1.87	6,687 6 9	46
268 17	182 12 9	1,356 6 6	8 4 0	1,547 7 3	3.10	50,797 11 3	47
287 1	187 8 6	348 0 0	8 12 0	544 4 6	0.64	55,864 14 0	48
4,107 14	3,363 11 6	8,205 10 9	154 0 0	11,723 6 3	1.92	5,88,274 10 9	49
2,336 10	1,941 6 3	4,072 15 6	8 4 0	6,622 9 9	6.43	59,403 0 0	50
9 3	5 6 0	12 0 0	24 9 0	41 15 9	7.76	473 15 9	51
...	...	...	...	...	...	1,680 15 6	52
...	...	...	...	...	...	7,294 7 0	53
148 2	135 13 0	1,047 11 9	19 8 0	1,203 0 9	10.12	12,911 2 9	54
...	1,060 0 0	...	16 0 0	1,016 0 0	17.44	14,727 0 6	55
...	282 7 0	...	0 10 0	283 1 0	17.31	2,480 11 0	56
...	...	...	...	...	...	918 12 9	57
366 6	...	469 0 3	65 10 6	534 10 9	4.62	9,331 1 3	58
...	...	...	...	...	...	16,543 1 3	59
1,727 3	1,663 4 9	10,437 4 0	1,319 9 6	13,420 2 3	61.42	52,398 7 9	60
737 6	416 18 0	3,095 8 6	91 4 9	3,603 10 3	1.08	1,49,666 1 0	61
12,643 10	9,319 6 3	25,326 13 9	5,478 4 0	40,124 8 0	23.42	5,59,793 10 6	62
211 13	20 6 6	481 3 6	19 8 0	521 2 0	2.52	10,918 7 6	63
...	...	553 14 0	10 0 0	563 14 0	11.74	16,608 14 0	64
51,437 13	30,802 3 0	1,03,808 8 6	9,093 8 6	1,52,704 4 0	...	32,77,881 10 0	

No	Name of Work.	OUTLAY.			High water level.	Water, if any, from previous year.	Height of water last rains.
		Expenditure up to last year.	Expenditure during the year.	Total.			
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Ft. in.	Ft. in.	Ft. in.
	Brought forward	25,80,056 10 11	24,456 13 1	26,13,513 8 0	...	...	...
65	Naharkhora ...	6,939 14 8	2 5 0	6,942 3 8	8 0	...	...
66	Salampur ...	3,506 14 6	63 8 5	3,570 6 11	5 0	...	3 0
67	Seekanderpur ...	8,510 15 1	10 14 8	8,521 13 9	9 0	...	...
68	Jatwala Hindown ...	9,982 2 4	20 7 1	10,002 9 5	7 6	...	5 0
69	Maiswa Hindown ...	36,882 0 2	9 12 4	36,891 12 6	11 0	...	7 0
70	Futteh Sagur ...	13,718 2 10	405 5 6	14,123 8 4	17 0	...	16 0
71	Bishan Samand Ghat Bhundary,	52,605 6 9	..000 12 2	53,506 2 11	26 0	...	12 2
72	Howda Hali ...	21,266 9 3	65 14 6	21,332 7 9	14 0	...	8 1
73	Jhunki ...	2,823 5 8	...	2,823 5 8	5 0	...	3 1
74	Shumspore ...	8,643 15 3	15 7 3	8,659 6 6	9 0	...	7
75	Telanwala, Wazirpore	9,158 9 7	{ 7 0 0 }	9,250 15 9	6 0	...	6
76	Ram Talao, Wazirpore		{ 40 7 3 }		6 0	...	6
77	Bara Talao, Wazirpore		{ 44 14 11 }		6 0	...	6 1
78	Nimazwala, Wazirpore	504 0 11	5 12 6	509 13 5	3 0	...	3 1
79	Jhoriwala ...	15,239 4 6	954 14 10	16,194 3 4	7 0	...	7 1
80	Jeoli ..	14,271 1 9	43 2 11	14,314 4 8	...	...	...
81	Nazimwala ...				7 0	...	2
82	Mirzaporewala ...				5 0	...	2
83	Binoli Supply Cut...	1,20,613 5 1	793 5 0	1,21,406 10 1	8 0	...	...
84	Moti Sagur Gaouri	23,096 7 6	2,507 14 1	25,604 5 7	8 0	...	4
85	Ghorla ..	4,591 0 4	81 10 7	4,672 10 11	5 0	...	5
86	Shunker Talao Goojur Thikria,	9,012 10 5	22 6 3	9,035 0 8	8 0	...	8
87	Ram Sagur Malarna Chour	63,446 10 2	364 9 6	63,811 3 8	10 0	...	8
88	Dhelra Tank ...	6,158 2 6	521 10 3	6,679 12 9	6 0	...	3
89	Doorga Sagur ...	27,181 0 9	{ 85 11 5 }	27,326 1 1	{ 6 0	...	3
90	Dhund ...		{ 59 4 11 }		{ 6 0	...	5
91	Jey Sagur Toond ...		{ 69 13 3 }		{ 8 0	...	8
92	Bhorati Bund ...	3,993 14 7	31 14 0	4,025 12 7	9 0	...	4
93	Nuglao Baonli ...	11,647 0 6	{ 216 14 3 }	11,902 11 0	{ 9 0	...	1
94	Kharila ...		{ 18 1 5 }		{ 9 0	...	3
95	Bhem Sagur ...		{ 20 10 10 }		{ 9 0	...	4
96	Buchara ...	3,39,447 1 8	1,234 14 10	3,40,682 0 6	55 0	...	38
97	Saimadi Phagi ...	3,856 13 1	7 15 9	3,864 12 10	6 0	...	11
	Carried over	34,47,632 6 10	33,084 4 9	34,80,716 11 7	...	...	...

## DIX E—(continued).

RETURNS FOR THE YEAR.					Percentage on Outlay.	Total amount realized up to end of August 1901.	No.
No of bighas irrigated.	Amount of water-rate.	Amount of share of produce.	Miscellaneous.	Total.			
Big. bis	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
51,437 13	39,802 3 0	1,03,808 8 6	9,093 8 6	1,52,704 4 0	...	32,77,881 10 0	
7 1	4 9 3	15 2 6	13 12 0	33 7 9	0.47	2,716 7 8	65
...	...	...	3 0 0	3 0 0	0.08	970 4 0	66
...	...	100 0 0	10 12 0	110 12 0	1.30	4,778 8 6	67
25 6	6 5 3	122 3 9	24 2 0	152 11 0	1.52	16,130 6 0	68
43 1	18 11 0	590 13 0	11 8 0	621 0 0	1.08	33,240 12 6	69
629 5	239 8 6	2,999 6 9	40 4 0	3,279 3 8	23.21	1,01,398 1 9	70
4,363 12	2,483 14 6	14,242 9 3	944 14 9	17,671 6 6	10.70	1,85,111 5 3	71
493 6	281 11 6	1,947 0 6	55 2 3	2,283 14 3	10.70	31,895 4 3	72
...	...	...	3 0 0	3 0 0	0.10	9,245 15 6	73
...	...	...	...	...	...	2,835 0 6	74
147 7	140 2 6	552 6 0	5 4 0	706 12 6	...	18,182 6 0	75
204 3	148 3 3	619 5 9	41 8 0	809 1 0	18.93	9,202 0 6	76
78 3	50 1 6	170 12 6	17 3 3	238 1 3	...	3,804 6 0	77
8 10	5 4 0	20 8 0	4 12 0	30 8 0	5.68	2,248 15 9	78
452 2	263 2 6	1,536 6 3	21 8 0	1,821 0 9	11.24	20,813 6 6	79
...	...	...	...	...	...	1,200 10 0	80
245 12	121 14 9	491 3 0	152 1 0	765 2 9	5.66	24,165 9 9	81
15 6	7 10 6	30 9 9	7 10 6	45 14 9	...	5,061 0 0	82
2,789 15	1,700 1 0	4,144 12 0	1,036 4 0	6,881 1 0	5.66	2,34,000 5 3	83
...	...	...	...	...	...	9,792 8 6	84
...	...	...	...	...	...	146 6 0	85
194 10	66 0 9	408 6 3	33 15 9	508 6 9	5.62	9,313 9 3	86
774 17	638 12 6	2,734 8 9	448 8 9	3,821 14 0	5.98	56,214 2 6	87
372 19	248 13 6	1,302 0 6	179 2 6	1,730 0 6	27.39	33,589 7 0	88
135 17	79 3 3	473 7 9	67 2 9	619 13 9	...	21,345 11 3	89
185 19	95 15 6	647 8 6	84 10 0	828 2 0	5.29	5,314 9 9	90
737 18	440 6 6	2,400 13 0	314 9 6	3,155 13 0	7.69	33,873 8 6	91
69 10	43 14 9	242 6 0	0 5 6	286 10 3	6.11	5,530 3 3	92
256 5	206 9 3	602 0 0	69 1 0	877 10 3	...	19,029 12 6	93
178 12	146 11 0	349 0 0	96 8 0	592 3 0	15.60	5,693 8 0	94
128 4	72 14 9	250 0 0	63 14 0	386 12 9	...	4,122 5 0	95
6,222 12	5,925 13 0	20,054 4 0	1,402 2 0	27,382 3 0	8.03	2,41,636 8 6	96
90 10	54 2 0	119 6 0	...	173 8 0	4.50	1,348 3 0	97
70,288 4	53,301 11 9	1,60,975 8 3	14,246 2 0	2,28,523 6 0	...	44,37,940 9 9	

No.	Name of Work.	OUTLAY.			High water level.	Water, if any, from previous year.	Height of water last rains.
		Expenditure up to last year.	Expenditure during the year.	Total.			
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Ft. in.	Ft. in.	Ft. in.
	Brought forward ...	34,47,632 6 10	33,084 4 9	34,80,716 11 7	...	...	...
98	Bar Solankiyan ...	5,572 11 11	7 9 0	5,580 4 11	5 0	...	...
99	Bartal Bund ...	5,282 1 8	...	5,282 1 8	...	...	...
100	Kalumda Tank Helolao ...	10,169 8 1	33 6 9	10,202 14 10	8 0	...	8 C
101	Roopahaily ...	6,463 13 1	1,107 4 9	7,571 1 10	7 0	...	5 6
102	Ganethi Bund ...	19,622 10 2	1,067 1 0	20,689 11 2	10 0	...	7
103	More Bund ...	5,044 11 10	1 10 0	5,046 5 10	6 0	...	1
104	Dhund Tank Nagur ...	1,714 5 9	3 9 0	1,717 14 9	6 0	...	1
105	Baneria Tank ...	4,155 12 6	1,826 7 7	5,982 4 1	4 0	...	2
106	Barwas Tank ...	1,351 9 6	...	1,351 9 6	4 0	...	...
107	Jacobabad Tank ...	3,108 13 0	...	3,108 13 0	3 0	...	...
108	Bankri Tank ...	2,313 11 1	18 14 4	2,332 9 5	8 0	...	...
109	Dhapawan ...	2,798 10 6	0 6 0	2,799 0 6	6 0	...	2
110	Haripura Bund ...	10,519 14 11	15 3 0	10,535 1 11	10 3	...	5
111	Buso Bund ...	9,931 0 8	...	9,931 0 8	...	...	...
112	Bhagwantgurh Bund ...	11,720 2 7	...	11,720 2 7	13 0	...	...
113	Khari Nullah ...	15,468 12 2	5 0 0	15,473 12 2	19 0	...	10
114	Rabauta ...	10,174 11 9	1,694 3 7	11,868 15 4	6 0	...	2
115	Madhosinghpura ...	10,792 3 0	10 6 0	10,802 9 0	12 0	0 6	10
116	Naya Tolao, Lawali ...	14,163 11 1	112 7 7	14,276 2 8	5 0	...	1
117	Dhunawali Bunri ...	291 12 4	...	291 12 4	2 6	...	...
118	Gotrawala ...	117 3 7	9 3 6	126 7 1	3 0	...	...
119	Moti Sagur Churu ...	7,037 14 0	195 15 0	7,233 13 0	5 0	...	...
120	New Bund, Islampur ...	17,893 5 4	154 5 0	18,047 10 4	5 0	...	1
121	Lambia Toda Rai Singh ...	1,502 11 2	7 2 0	1,509 13 2	6 0	...	...
122	Sainthal Weir ...	18,319 10 10	...	18,319 10 10	...	...	...
123	Minaka Lota ...	1,262 4 5	...	1,262 4 5	2 0	...	...
124	Matholao ...	6,606 13 9	13 4 6	6,620 2 3	6 0	...	2
125	Garara Bund ...	36,689 1 10	203 12 5	36,892 14 3	14 0	...	10
126	Chaparwara Bund ...	5,18,435 2 10	14,828 11 9	5,33,263 14 7	17 0	...	0
127	Raj Bagh ...	7,160 3 6	...	7,427 0 6	...	...	...
	Gulab Bagh ...		76 7 3				
	Runjka ...		51 6 0				
	Matwali ...		101 5 9				
	Sheopur and Bombala ...		37 10 0				
	Carried over ...	42,13,317 9 8	54,667 0	42,67,984 10 2	...	...	...

## DIX E—(continued).

RETURNS FOR THE YEAR.					Percentage on Outlay.	Total amount realized up to end of August 1901.	No.
No. of bigas irrigated.	Amount of water-rate.	Amount of share of produce.	Miscellaneous	Total.			
Big. bis.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
70,288 4	53,301 11 9	1,60,975 8 3	14,246 2 0	2,28,523 6 0	..	44,37,940 9 9	
207 12	103 12 9	415 0 0	..	518 12 9	9.30	6,610 8 0	98
..	..	..	..	..	..	161 2 6	99
..	..	..	..	..	..	..	100
21 16	10 14 3	43 9 9	60 6 3	114 14 3	1.51	2,634 12 9	101
169 16	148 13 3	847 15 9	20 8 0	1,017 5 0	4.91	8,450 1 0	102
17 5	8 10 0	4 0 0	3 0 0	15 10 0	0.31	3,179 8 6	103
102 15	50 1 0	205 8 3	..	255 9 3	14.90	2,703 3 9	104
43 5	41 15 3	207 5 9	53 12 0	393 1 0	7.12	5,039 6 6	105
..	..	..	..	..	..	365 6 9	106
..	..	..	39 4 0	39 4 0	1.25	8,960 7 0	107
24 11	23 1 9	21 6 0	3 8 0	47 15 9	2.05	779 10 6	108
..	..	37 9 9	0 11 0	38 4 9	1.35	316 4 3	109
..	0 8 0	..	1 12 0	2 4 0	0.01	3,018 13 0	110
..	..	..	..	..	..	4 0 0	111
..	..	..	18 3 0	18 3 0	0.15	436 0 9	112
..	..	..	2 8 6	2 8 6	0.19	6,308 15 0	113
108 0	60 14 6	285 0 0	3 0 0	348 14 6	2.09	6,529 12 9	114
249 18	134 12 3	440 3 0	14 9 6	589 8 9	4.13	6,785 10 3	115
..	..	..	..	..	..	..	116
..	..	..	..	..	..	..	117
..	..	..	..	..	..	..	118
252 11	28 8 9	345 8 9	56 10 0	430 11 6	6.04	3 159 0 3	119
22 1	12 5 0	0 8 0	10 12 0	23 9 0	0.13	1,787 15 6	120
..	..	..	5 1 0	5 1 0	0.33	293 15 3	121
136 13	54 0 3	323 7 0	106 6 3	543 13 6	2.96	7,511 15 0	122
..	..	..	..	..	..	..	123
326 8	167 9 0	1,032 4 0	4 4 0	1,204 1 0	18.88	3 220 4 3	124
1,252 17	994 15 6	2,333 11 6	1 0 0	3,329 11 0	9.02	26,113 0 9	125
8,394 6	7,087 2 9	16,146 1 6	88 14 0	23,322 2 3	4.37	1,57,206 6 3	126
77 1	84 12 9	154 1 6	..	238 14 3	48.17	1,95,236 3 6	127
117 14	37 9 6	192 10 0	..	230 3 6			
..	..	..	..	..			
1,486 4	423 0 9	2,211 4 3	..	2,634 5 0			
272 0	75 1 9	399 3 0	..	474 4 9			
83,569 17	62,850 4 9	1,86,711 14 0	14,800 3 6	2,64,302 6 3	..	48,94,753 1 9	

No	Name of Work.	OUTLAY.			High water level.	Water, if any, from previous year.	Height of water, last rains.
		Expenditure up to last year.	Expenditure during the year.	Total.			
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Ft. in.	Ft. in.	Ft. in.
	Brought forward ..	42,13,317 9 8	54,667 0 6	42,67,984 10 2	..	..	..
128	Bishan Samand or Ghat ..	..	..	..	..	..	..
	Bhundari Supply Cut ..	1,011 11 2	40 2 4	1,051 13 6	..	..	..
	(Toda Bhim Canal) ..	..	..	..	..	..	..
129	Dhundera ..	2,164 0 6	..	2,164 0 6	..	..	..
130	Jatoli Bund ..	3,494 3 2	1 15 6	3,496 2 8	8 0	..	1 0
131	Chan Bund ..	14,316 8 11	1,294 15 6	15,611 8 5	5 0	..	2 0
132	Mohi Bund ..	17,506 12 8	94 5 3	17,601 1 11	6 0	..	2
133	Sultana Bund ..	7,263 9 10	2 9 6	7,266 3 4	5 0	..	..
134	Nasota Bund ..	1,110 0 3	17 0 9	1,127 1 0	4 0	..	..
135	Chatterpura and Khatipura ..	2,510 14 1	29 0 6	2,539 14 7	4 0	..	..
136	Ramiawala Bund ..	2,930 1 4	36 1 10	2,966 3 2	9 0	..	7 0
137	Benoli Bund ..	37,222 3 6	1,531 11 2	38,753 14 8	17 0	..	13 0
138	Dakhen Sagur ..	14,225 5 10	11 14 11	14,237 4 9	10 0	..	3 0
139	Tank Chandia near Mozabad ..	3,894 0 9	1 8 0	3,895 9 9	4 0	..	..
140	Tank Dhamana ..	4,340 5 1	26 9 0	4,366 14 1	4 0	..	..
141	Kerli Sagur at Toda Rai Singh,	8,202 15 0	1,926 8 8	10,129 7 8	6 0	..	3
142	Sainthal Sagur ..	1,62,952 0 8	4,780 4 0	1,67,732 4 8	28 0	..	26
143	Pundrara ..	9,269 0 9	62 2 6	9,331 3 3	6 0	..	3
144	Sanwatgurh ..	18,532 13 8	1,615 10 6	20,148 8 2	6 0	..	3
145	Negoh Bund ..	11,217 13 10	498 9 1	11,716 6 11	..	..	..
146	Ramgurh Bund ..	3,47,515 2 1	72,056 2 2	4,19,571 4 3	61 0	..	26
147	Bari-ka-Thore at Bairath ..	24,770 7 11	120 14 2	24,891 6 1	15 0	..	6
148	Gundal Sagur ..	10,482 13 9	88 8 5	10,571 6 5	6 6	..	4
149	Khundar Sagur ..	2,313 9 8	..	2,313 9 8	..	..	..
150	Harbhagatpura Tank ..	4,627 14 11	..	4,627 14 11	4 0	..	1
151	Ghatialy Bund ..	4,294 13 6	26 6 3	4,321 3 9	6 0	..	4
152	Rundh Jagrampura Bund ..	4,627 15 5	456 14 9	5,084 14 2	5 0	..	..
153	Bala Sagur at Sakarwara village,	5,169 8 5	80 7 6	5,249 15 11	5 0	..	4
154	New Tank at Manpura village..	4,441 2 3	27 11 6	4,468 13 9	44 0	..	..
155	Bund Hoshapura Tehsil Toda Rai Singh ..	5,943 8 8	2,044 10 10	7,989 3 6	7 0	..	..
156	New Bund at Gopipura near Punwar ..	1,196 1 6	368 14 0	1,564 15 6	3 0	..	2
157	Repairs to Bumb Talao at Malpura ..	1,290 3 3	0 6 0	1,290 9 3	..	..	..
	Carried over ...	49,52,155 8 0	1,41,909 2 4	50,94,064 10 4	..	..	..

78744

## DIX E—(continued).

RETURNS FOR THE YEAR.					Percentage on Outlay	Total amount realized up to end of August 1901.	No.
No of bighas irrigated	Amount of water-rate	Amount of share of produce.	Miscellaneous	Total.			
Big. bis	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
83,569 17	62,850 4 9	1 86,711 14 0	14,800 3 6	2,61,362 6 3	..	48,94,753 1 9	
46 17	12 1 3	209 8 6	62 6 6	234 0 3	26 90	4,360 10 6	128
..	..	..	..	..	..	16 0 0	129
..	..	12 15 0	6 8 0	19 7 0	0 54	126 0 0	130
..	..	..	..	..	..	429 15 3	131
66 9	61 11 6	80 13 9	16 13 0	159 6 3	0 90	257 11 3	132
399 6	195 5 9	450 0 0	9 2 0	654 7 9	9 00	3,177 10 9	133
..	..	..	..	..	..	..	134
..	..	..	..	..	..	..	135
81 8	74 3 3	84 6 3	80 8 9	239 2 3	8 06	1 026 9 6	136
..	..	..	..	..	..	..	137
203 4	185 15 9	645 6 0	114 3 3	945 9 0	6 64	3,626 6 3	138
..	..	..	..	..	..	..	139
..	..	..	..	..	..	28 8 0	140
..	..	..	..	..	..	510 6 0	141
..	..	..	..	..	..	..	142
244 9	141 1 6	518 0 9	4 0 0	663 5 3	7 10	2,012 9 0	143
..	..	..	..	..	..	..	144
..	..	..	..	..	..	..	145
..	..	..	..	..	..	..	146
14 1	15 3 3	56 0 0	..	71 3 3	2 85	123 3 6	147
44 19	26 0 0	44 15 3	16 6 0	87 5 3	0 82	2,740 4 3	148
..	..	..	..	..	..	..	149
103 7	54 14 9	194 12 0	..	249 10 9	5 40	275 4 3	150
86 13	53 1 3	173 5 0	1 8 0	227 14 3	5 27	405 2 0	151
..	..	..	..	..	..	..	152
..	..	..	..	..	..	..	153
109 3	64 14 6	217 14 0	..	282 12 6	6 33	282 12 6	154
..	..	..	..	..	..	..	155
66 11	33 11 0	60 0 0	..	93 11 0	6 0	93 11 0	156
..	..	..	..	..	..	..	157
85,039 4	63 768 11 6	1,89,459 14 6	15,111 11 0	2,68,340 5 0	..	49,14,245 13 9	



No	Name of Work.	OUTLAY.			High water level.	Water, if any, from previous year	Height of water last rains.
		Expenditure up to last year.	Expenditure during the year.	Total.			
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Ft. in	Ft. in.	Ft. in.
	Brought forward ..	40,52,155 8 0	1,41,909 2 4	50,94,064 10 4	..	..	..
158	Heelolao Tank at Toda ..	1,881 7 5	..	1,881 7 5	..	..	..
159	Hingonia Weir ..	3,630 13 2	4,280 15 2	7,920 12 4	..	..	..
160	New Bund Uturna Thikana Dooni ..	3,144 1 4	700 6 9	3,904 8 1	6 0	..	..
161	Halolao Tank at Newai ..	14,904 1 10	2,748 8 5	17,652 10 3	10 0	..	..
162	Bhairon Sagur Thali ..	1,439 0 0	943 11 11	2,382 11 11	5 0	..	..
163	Barial Bund ..	1,385 12 3	1,049 5 8	2,435 1 11	..	..	..
164	Baragaon Wala Tank at Mowah, ..	5,422 10 4	5,941 14 4	11,364 8 8	11 0	..	..
165	Jalsain Tank ..	6,353 4 7	1,865 11 1	8,218 15 8	..	..	..
166	Goonsar Tank ..	528 11 6	..	528 11 6	..	..	..
167	Bara Udaiwala Tank, Bariwala (Baniawala) ..	1,089 11 2	2,317 10 4	3,407 5 6	..	..	4
168	Nainwari Bund at Baoli ..	1,036 12 8	251 3 8	1,908 0 4	10 3	..	..
169	Sheo Dongri Bund ..	38,576 1 7	4,760 6 4	43,336 7 11	20 0	..	..
170	Renwal Bund ..	8,600 13 6	205 1 3	8,805 14 9	8 0	..	..
171	Mandi Bund ..	2,669 0 2	392 4 2	3,061 4 4	4 0	..	..
172	Kiria or Dwarkapura ..	4,718 15 9	725 0 0	5,443 15 9	6 0	..	..
173	Dholai Bund ..	118 10 9	273 7 1	392 1 10	5 0	..	..
174	Bodia Bund ..	1,550 11 11	1,189 7 8	2,740 3 7	8 0	..	..
175	Pichala Bund ..	2,080 1 9	629 3 4	2,709 5 1	3 0	..	..
176	Churu Sagur ..	6,918 15 4	9,852 0 2	16,770 15 6	6 0	..	..
177	Baganit Sagur ..	647 0 3	237 14 9	884 15 0	2 0	..	..
178	Saladra Tank ..	3,397 8 10	86 1 3	3,483 10 1	4 0	..	2
179	Kala Nada Bund ..	5,003 2 1	791 2 3	5,794 4 4	6 0	..	4
180	Bhairon Sagur Chandsin ..	58,620 5 0	26,752 3 1	85,372 8 1	20 0	..	..
181	Kishanpura Tank ..	1,326 11 11	25 11 0	1,352 6 11	4 0	..	..
182	Katli River, Inundation Cut ..	17,957 12 3	7,987 1 0	25,944 13 3	..	..	..
183	Faridpura Koond ..	19 13 0	..	19 13 0	..	..	..
184	Boiyala or Bainra Tank Toda Rai Singh ..	1,537 7 0	609 15 1	2,147 6 1	6 0	..	..
185	Datoli near Madhorajpura ..	1,063 6 1	14 6 4	1,018 15 9	..	..	..
186	Rampura Tank ..	1,217 11 6	122 7 0	1,340 2 6	..	..	..
187	Govindi ..	1,789 13 10	816 8 7	2,606 6 5	2 0	..	..
188	Bund Bugri or Nonaria ..	2,003 5 6	1,501 0 10	3,504 6 4	..	..	..
189	Banthali near Lamba Bara ..	2,495 0 8	58 5 11	2,553 6 7	..	..	..
	Carried over ..	51,55,913 6 11	2,19,069 8 1	53,74,982 15 0	..	..	..

## DIX E.—contd.

RETURNS FOR THE YEAR.					Percentage on Outlay.	Total amount realized up to end of August 1901.	No.
No of bigbas irrigated.	Amount of water rate	Amount of share of produce.	Miscellaneous	Total.			
Big. bis.	Rs. a p	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
85,039 4	68,768 11 6	1,59,459 14 6	15,111 11 0	2,63,349 5 0	..	49,14,245 13 9	
..	..	..	..	..	..	0 6 0	158
..	..	..	..	..	..	..	159
..	..	..	..	..	..	..	160
..	..	..	..	..	..	..	161
24 3	22 7 0	24 2 3	15 5 3	64 14 6	2.72	64 14 6	162
..	..	..	3 4 0	3 4 0	0.12	3 4 0	163
113 11	58 13 3	369 5 0	..	399 2 3	3.51	399 2 3	164
..	..	..	..	..	..	..	165
..	..	..	..	..	..	..	166
..	..	..	..	..	..	..	167
..	..	..	..	..	..	..	168
..	..	..	..	..	..	..	169
..	..	..	..	..	..	..	170
122 11	21 0 9	169 0 0	1 0 0	122 0 9	3.89	122 0 9	171
..	..	..	..	..	..	..	172
..	..	..	..	..	..	..	173
..	..	..	..	..	..	29 6 0	174
..	..	..	..	..	..	..	175
..	..	..	..	..	..	..	176
..	..	..	..	..	..	..	177
..	..	..	..	..	..	..	178
..	..	..	..	..	..	..	179
..	..	..	..	..	..	..	180
9 2	6 1 3	4 0 0	..	10 1 3	0.73	10 1 3	181
..	..	..	..	..	..	..	182
..	..	..	..	..	..	..	183
33 3	16 14 6	80 0 0	..	96 14 6	4.52	96 14 6	184
..	..	..	..	..	..	..	185
..	..	..	..	..	..	..	186
18 18	7 10 9	15 0 0	..	22 10 9	0.88	22 10 9	187
..	..	..	..	..	..	..	188
..	..	..	..	..	..	..	189
85,360 12	63,881 11 0	1,00,043 5 9	15,131 4 3	2,69,059 5 0	..	49,14,991 9 9	



## DIX E—(concl'd.)

RETURNS FOR THE YEAR.					Percentage on Outlay.	Total amount realized up to end of August 1901.	No.
No. of bighas irrigated.	Amount of water rate.	Amount of share of produce.	Miscellaneous	Total.			
Big. bis.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
85,360 12	63,881 11 0	1,90,043 5 9	15,134 4 3	2,69,059 5 0	...	49,14,994 9 9	
...	..	...	..	..	..	..	190
...	...	...	..	..	...	..	191
...	...	...	...	...	...	...	192
...	...	...	...	...	...	...	193
...	...	...	...	...	...	...	194
18 18	9 7 3	37 12 6	...	47 3 9	0.32	47 3 9	195
...	..	...	...	...	...	...	196
...	...	...	...	...	...	...	197
...	...	...	...	...	...	...	198
...	...	...	...	...	...	...	199
85,370 10	63,891 2 3	1,90,091 2 3	15,134 4 3	2,69,106 8 9	4.97	49,15,041 13 6	

and which have been included in the Jaipur Railway accounts.

## APPENDIX F.

IRRIGATION STATEMENT of the northern and eastern districts for the year ending 31st August 1901, or the Raj Official year Sambat 1957.

## 1. The land irrigated during the year under review was :—

					Big.	bis.
By flow	...	...	...	...	36,499	15
„ lift	...	...	...	...	1,946	16
			*Total	...	38,446	11
Bed of tanks	...	...	...	...	1,608	11
	...		Grand Total	...	40,055	2

## 2. The Revenue collected on irrigation has been :—

			Rs.	a.	p.
Water rate	...	...	30,897	7	6
Wells	...	...	7	6	9
				Rs.	a. p.
				30,904	14 3
Miscellaneous :—	...	...			
Fine for not making kiaries	...	...	12,037	15	6
Fine for wasting water	...	...	400	3	9
Cattle trespass	...	...	37	9	3
Miscellaneous	...	...	134	2	6
Total	...	...	12,609	15	0
Sale of grass	...	...	409	14	0
„ singharas	...	...	144	4	9
„ wood	...	...	301	11	0
„ patras	...	...	217	0	0
Total	...	...	1,072	13	9
				13,682	12 9
Total	...	...		44,587	11 0

## 3. Detail of 38,446 bighas and 11 biswas of land cultivated :—

					Big.	bis.
Single crop	...	...	...	...	36,830	16
Bi-crop	...	...	...	...	1,615	15
			Total	...	38,446	11

					Big.	Bis.
* N. B.—Khalsa (raj)	..	..	..	..	24,244	8
Jagir (oodick)	..	..	..	..	14,202	3
			Total	..	38,446	11

4. The following statement shows the areas irrigated and the crops grown :—

Crops grown.					Areas irrigated.	
					Bighas.	Biswa.
Barley	...	...	...	...	15,172	19
Mucca	...	...	...	...	110	5
Cotton	...	...	...	...	1,706	2
Wheat	...	...	...	...	8,956	3
Rice	...	...	...	...	1,505	10
Gram	...	...	...	...	5,400	11
Bajra	...	...	...	...	6	18
Jowar	...	...	...	...	156	12
Sugarcane	...	...	...	...	285	8
Barley and gram	...	...	...	...	2,029	0
Ranjka	...	...	...	...	4	6
Carrot	...	...	...	...	45	14
Tobacco	...	...	...	...	29	15
Gowar	...	...	...	...	15	14
Til (sesame)	...	...	...	...	6	11
Zira (cumin seed)	...	...	...	...	958	13
Opium	...	...	...	...	567	10
Arhar	...	...	...	...	12	3
Vegetables	...	...	...	...	81	17
Kodoon	...	...	...	...	0	16
Corriander seed (dhania)	...	...	...	...	76	11
Sounf	...	...	...	...	0	4
Wheat and gram	...	...	...	...	610	2
Chillis	...	...	...	...	0	18
Kasni	...	...	...	...	0	13
Post (poppy)	...	...	...	...	16	10
China	...	...	...	...	27	12
Watering	...	...	...	...	507	11
Maithee	...	...	...	...	20	2
Sarsoun	...	...	...	...	4	10
Lehson	...	...	...	...	0	8
Gardens	...	...	...	...	2	5
Wheat and barley	...	...	...	...	126	18
Total					38,446	11

5. Total revenue collected this year, including water rate, produce, &c., amounts to Rs.1,48,797-0-6, and the cost of supervision and guarding amounts to Rs.9,702, which gives a percentage of Rs.6-8-8.

6. Irrigation commenced from the 4th September 1900, and continued up to the 25th February 1901. Irrigation lasted for 175 days, which gives average daily irrigation of 219 bighas 14 biswas of land.

Besides this the surplus water from the bunds Moran Sagar, Benori Sagar, Madho Sagar, Naglao and Sainthal Sagar, through Sendholi was supplied to the cotton plantation during April and May 1901.

7. This year the revenue has increased a little more than that of 1900, viz :—

			Rs.	a.	p.
Revenue for the year under review	...	...	1,48,281	0	6
Revenue for last year	...	...	1,17,523	7	0
Increase			30,757	9	0

Following is the detailed statement showing areas irrigated in each Nizamat :—

AREAS IRRIGATED.	NIZAMAT SEWAI, JAIPUR.		NIZAMAT TORA- WATI.		NIZAMAT DOSA.		NIZAMAT HINDOWN.		NIZAMAT GANGA- PUR.		NIZAMAT MADHO- PUR.		TOTAL.	
	Bighas.	Diswas.	Bighas.	Diswas.	Bighas.	Diswas.	Bighas.	Diswas.	Bighas.	Diswas.	Bighas.	Diswas.	Bighas.	Diswas.
Khalsa ... ..	1,412	14	1,347	17	2,649	17	4,498	9	11,437	18	2,897	13	24,244	8
Jagir (oodick) ... ..	3,593	5	4,888	16	2,650	717	121	16	2,802	7	145	2	14,202	3
Bed of tanks ... ..	16	0	...	...	717	15	874	16	...	...	...	...	1,608	11
Total ... ..	5,021	19	6,236	13	6,016	9	5,495	1	14,240	5	3,042	15	40,055	2

## APPENDIX G.

IRRIGATION STATEMENT of the western and southern district for the year ending 31st August 1901, or the Raj Official year Sambat 1957.

## 1. The land irrigated during the year under review was :—

					Big.	bis.
By flow	...	...	...	...	41,620	7
„ lift	...	...	...	...	1,439	7
			* Total	...	43,059	14
Beds of tanks	...	...	...	...	2,274	2
			Grand Total	...	45,333	16

Besides this 13 bighas and 10 biswas of land of khalsa gardens was irrigated on which no water rate was collected.

## 2. The revenue collected during the year is as under :—

			Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	
Water rate	...	...	...	...	...	...	...	...	32,993	10	9	
Miscellaneous :—												
Fine imposed for wasting water	...	...	...	...	...	167	8	6				
Cattle Trespass	...	...	...	...	...	50	14	0				
Miscellaneous	...	...	...	...	...	98	7	6				
		Total	...	...	...	316	14	0				
Sale of grass	...	...	...	81	14	0						
„ wood	...	...	...	870	13	6						
„ patras	...	...	...	181	14	0	1,134	9	6	1,451	7	6
		Total	...	...	...	...	...	...	34,445	2	3	

## 3. Detail of 43,059 bighas and 14 biswas of land cultivated :—

					Big.	bis.
Single crop	...	...	...	...	42,957	0
Bi-crop	...	...	...	...	102	14
			Total	...	43,059	14

					Big.	bis.
* N.B. Khalsa (raj)	..	..	..	..	30,536	4
Jagir (oodick)	..	..	..	..	12,523	10
			Total	..	43,059	14



4. The following statement shows the areas irrigated and the crops grown :—

Crops grown.						AREAS IRRIGATED.	
						Big.	bis.
Cotton	...	...	...	...	...	3,586	15
Mucca	...	...	...	...	...	525	14
Gowar	...	...	...	...	...	0	8
Sugarcane	...	...	...	...	...	46	10
Jowar	...	...	...	...	...	18	6
Paddy (rice)	...	...	...	...	...	25	2
Indigo	...	...	...	...	...	25	11
Maithee	...	...	...	...	...	123	12
Tobacco	...	...	...	...	...	52	2
Dhanra	...	...	...	...	...	31	19
Barley	...	...	...	...	...	26,411	11
Gram	...	...	...	...	...	1,544	14
Bejar (barley and gram)	...	...	...	...	...	3,990	1
Wheat	...	...	...	...	...	1,781	13
Palao (watering)	...	...	...	...	...	1,233	2
Alsi (linseed)	...	...	...	...	...	4	3
Vegetables	...	...	...	...	...	144	14
Chillis	...	...	...	...	...	5	6
Zira (cumin)	...	...	...	...	...	2,733	11
Carrot	...	...	...	...	...	18	18
Gojai (wheat and barley)	...	...	...	...	...	537	19
Guchani (wheat and gram)	...	...	...	...	...	86	11
Opium	...	...	...	...	...	17	17
Ranjka	...	...	...	...	...	3	19
China	...	...	...	...	...	35	9
Bajra	...	...	...	...	...	0	17
Gardens	...	...	...	...	...	64	14
Morla	...	...	...	...	...	2	5
Sarwa	...	...	...	...	...	1	2
Mundwa	...	...	...	...	...	5	9
Total						43,059	14

5. Total revenue collected this year, including water-rate, produce, &c., amounts to Rs.1,20,326-6-3, and the cost of supervision and guarding Rs.13,012, which gives a percentage of Rs.10-4-8.

6. In the Kharif crop irrigation commenced from 5th October 1900, and continued up to the 2nd February 1901; irrigation lasted for 121 days, which gives average daily irrigation of 355 bighas and 17 biswas. Irrigation was also done, but very little in the Rabi crop.

7. Following is the detailed statement showing areas irrigated in each Nizamats :—

AREAS IRRIGATED.		NIZAMAT MALPURA.		NIZAMAT SAMBHAR.		NIZAMAT SAWAI JAIPUR.		TOTAL.	
		Big.	bis.	Big.	bis.	Big.	bis.	Big.	bis.
Khalsa	...	11,842	19	13,244	5	5,449	0	30,536	4
Jagir (oodiek)	...	3,661	4	6,914	11	1,947	15	12,523	10
Beds of tanks	...	55	2	2,219	0	...	...	2,274	2
Total	...	15,559	5	22,377	16	7,396	15	45,333	16

8. The following new area has been brought under cultivation since the construction of the irrigation tanks :—

					Bighas
Toda Rai Singh	...	...	...	...	35,832
Malpura	...	...	..	...	11,805
Newai	...	...	...	...	300
Sambhur	..	...	...	..	2,700
Mozamabad	...	...	...	...	16,835
Phagi	...	...	..	...	2,000
Kaligh	...	...	...	...	2,050
Chaksu	...	...	...	..	4,725
Sewai Jaipur	...	...	...	...	2,200

## APPENDIX H.

*List of Final Bills submitted to Raj during 1901.*

No.	Name of Work.	Amount.		
		Rs.	a.	p.
1	Poorhouse at Naya Sagur, Mozabad ... ..	7,492	7	9
2	Exchange Compensation Allowance to Mr. C. E. Stotherd, Executive Engineer ... ..	670	9	11
3	Tonk-Deoli-Jehazpur Railway ... ..	4,299	6	10
4	Ballast breaking operation at Rewari-Phulera Railway ... ..	16,827	2	6
5	Supplying maps to the Raj Pothikhana ... ..	36	12	0
6	Repairing Raj silver rolling machine ... ..	43	15	10
7	Raising tap at Palace in Sanisurjika Chouk ... ..	4	13	6
8	Dispensary building at Uniyara ... ..	9,357	12	0
9	Laying temporary pipe at the house of Rao Bahadur Babu Kanti Chunder Mookerji ... ..	0	5	0
10	Altering tap at the house of Rao Bahadur Babu Kanti Chunder Mookerji ... ..	2	1	0
11	Laying temporary pipe for Nookta of Rao Bahadur Babu Kanti Chunder Mookerji ... ..	21	3	6
12	Sinking corrugated iron sheet bachri and repairing well at Police Ramgunge Chouk ... ..	318	0	0
13	Making dry stone pitching and floor near Sikar Khana Court at Chowgan ... ..	364	9	11
14	Watering trees of Parao at Mandawar ... ..	57	4	10
15	Do. do. do. ... ..	48	5	6
16	Repairing and clearing Kho Nagori Baori, pargana Sewai Jaipur, ... ..	262	12	4
17	Sinking masonry cylinder in well Chowkri Top Khana Hazoori, behind Sikhur bund temple ... ..	360	4	10
18	Sinking masonry cylinder in Muthka well Chowkri Ghat gate ... ..	267	12	1
19	Sinking corrugated iron sheet bachri in well Risala IV Bootaiti, Chowkri Poorani Busti ... ..	156	6	4
20	Works at Lunatic Asylum ... ..	771	8	7
21	Working wagons at the garden house of Rao Bahadur Babu Kanti Chunder Mookerji for the year 1899 ... ..	1,708	5	3
22	Working wagons at the garden house of Rao Bahadur Babu Kanti Chunder Mookerji for the year 1900 ... ..	1,737	15	11
23	Agra kothi maintenance of (catching monkeys) ... ..	15	0	0
24	Workhouse at Jaipur ... ..	636	0	0
25	Keep of horses for the Executive Engineer, Jaipur ... ..	850	14	5
26	Do. do. do. ... ..	1,075	3	3
27	Watering trees of garden at Jaipur bungalow ... ..	1,193	6	6
28	Supplying 1-inch rubber hose at Darukhana Palace ... ..	96	8	5
29	Making a new shed 100 feet long at poorhouse ... ..	300	10	5
30	Sinking well for Naina Dass Poojari Temple Sri Sita Ramji at Ghat Bhundari ... ..	189	6	0
31	Laying pipe at the house of Pandit Lachmi Narain, wakil, Residency ... ..	96	4	5
32	Repairs to Gap Bund, Dhapawan ... ..	232	7	4
33	Cutting rock in drinking well at Nagar, tahsil Malpura or well at Madhogarh ... ..	189	9	3
34	City water-supply, maintenance of ... ..	57,056	5	11
35	Do. do. do. ... ..	41,772	6	5
36	New bund, north-west of maidan, Mozabad ... ..	3,856	0	0
37	Kaligh Sagur Bandi Canal branch to Akhepura, 7 cart bridges and 7 sluices ... ..	2,303	0	0
38	Tori Sagur South Canal making a new tank at Indokhia and Kohara, for irrigating Harbhagatpura and Ramnevaspura ... ..	4,401	0	0
39	Pucca Corewall and repairs to pall for convenience of public at Bund Futteh Sagur ... ..	7,109	0	0
40	Repairing pall of Goli Rao Tank at Chaksu ... ..	164	0	6
41	Petty works at Ghat Bhundari supply cut and repairs to Chipolai kutchra road ... ..	222	1	6
	Carried over ... ..	1,66,569	3	

( 79 )

APPENDIX H—(contd.)

No.	Name of Work.	Amount.		
		Rs.	a.	p.
	Brought forward ...	1,66,569	3	9
42	Agra kothi maintenance of (scarcity and dearthness of fodder for 2 pairs of bullocks) ...	334	0	0
43	Sinking masonry cylinder in well kothi at Unpoorna outside Mori Eda	333	12	9
44	Repairing Khoorah Nasik Rasta Tikiwalan, Bazar Ki-hunpole ...	12	2	9
45	Plastering plinth of masonry of syce's quarter at the stable for stallion at Jaipur ...	5	14	0
46	Making 2 grass sheds, each 100 feet long. at poorhouse ...	600	9	3
47	Altering tap at Rawala Maharaniji Subha Sri Chandawatji ...	94	0	10
48	Bund Saitiwas increasing both ends of bund and mud corewall to catch water ...	396	0	0
49	Bund Binori Sagur ...	3,775	7	5
50	Agra kothi, white-washing, painting gate with colour and repairing left wing door on the reception of H. E. the Viceroy of India ...	40	10	3
51	Repairing well Beer Biraj Lalpura on Ajmer road, 6th mile ...	36	5	5
52	Erecting tap at the Superintendent, Transport Corps, Jaipur, house ...	38	2	9
53	Clearing and repairing well at Soorajpole Bazar at the request of Chaita and Sheo Lal, darhans ...	203	8	11
54	Sinking corrugated sheet bachri in well, mohalla Patatan Chowkri Top Khana Hazoori ...	113	9	0
55	Sinking corrugated sheet bachri in well of Koliyan at Ankul Khana	104	0	11
56	Do. do. do. in Koliyan ka well, Chowkri Top Khana Hazoori ...	167	2	11
57	Digging streets for diverting water of Chandpole Bazar ...	123	12	1
58	Sinking corrugated sheet bachri in sweet water well at Soorajpole Bazar ...	143	4	0
59	Making rubble stone floor at Gangapole gate ...	102	13	0
60	Laying pipe in branch school at Chandpole ...	225	1	6
61	Repairing Khoorah Rasta Ankanan Bazar, Kishunpole ...	21	7	8
62	Making Khoorah at the foot of Gooni Ghat ...	116	1	1
63	Clearing and repairing baori at Lanka village owing to scantiness of water ...	65	3	1
64	Erecting Ram Piao in Mistri Khana ...	276	12	5
65	Deepening 4 baoris for drinking purposes at Bhopat, Kinksi, &c., &c. ...	844	3	9
66	White-washing and petty repairs to Lunatic Asylum ...	340	10	5
67	Erecting tap at Hawalat Kotwali Hawali Nataniyan ...	158	12	2
68	Opening skylights in latrines and roof of barracks at Hawalat Foujdari	1,062	0	6
69	Taking out rubbish of pucca tank (drain) outside of the gate at Dosa Fort ...	337	3	8
70	Repairing fire engines, &c., of the Municipality, Jaipur ...	42	1	8
71	Repairing rails and wagons at the garden house of Rao Bahadur Babu Kanti Chunder Mookerji ...	4,019	8	8
72	Pucca well to the west side of new Jail, Jaipur ...	3,573	0	0
73	Putting folding hinged stops to the City gates in place of stone blocks in the middle of roads ...	120	0	0
74	Repairing fence of date plantation near Water-works ...	13	6	1
75	Sinking corrugated sheet bachri in well at Inspecting bungalow compound, Jaipur Transport Corps ...	171	11	8
76	Repairing wire fencing of date trees and putting a gate ...	54	14	1
77	Repairing fence of Bani Chandpole ...	191	7	11
78	Sinking corrugated sheet bachri in well, mohalla Khoomran Chowkri Top Khana Hazoori ...	191	9	3
79	Works at Raja Mull ka Talao ...	4,639	10	2
80	Bund in Ghat behind Seth Anant Ram's garden ...	1,884	1	4
81	Making dry stone floor in Gandha Nullah ...	583	13	0
82	Making dry rubble stone drain near Raja Mull Khatri's ghair ...	402	12	4
83	Repairs to bund and filling gap with dry rubble stone near Madho Bilas ...	162	10	2
84	Drystone pitching in Gandha Nullah near Sayad Valayat Ally's house	460	13	6
85	Making new road from Amer Chank to Madho Bilas ...	32,174	8	6
	Total ...	2,25,328	10	7



---

ANNUAL REPORT  
OF  
LALA RUP CHAND,  
*Assistant Engineer,*  
JAIPUR STATE,  
FOR THE  
YEAR ENDING 31ST DECEMBER 1901.

---



# INDEX.

---

PARA.						<i>Page.</i>
1.	Introduction	...	...	...	...	1
2.	Statement of Expenditure	...	...	...	...	1
3.	Rainfall and Ratio of run off	...	...	...	...	1
4.	Plans and Estimates	...	...	...	...	1
5.	Journal	...	...	...	...	1
6.	Office Works	...	...	...	...	2
7.	Testimony to Office Establishment	...	...	...	...	2
8.	Sub-Overseers	...	...	...	...	2
DISPENSARIES.						
9.	Dispensary Nim ka Thanah	...	...	...	...	2
10.	Do. Chaksu	...	...	...	...	2
ORIGINAL WORKS (IRRIGATION).						
11.	Ramgarh Irrigation Works	...	...	...	...	2
12.	Sheodungri Bund	...	...	...	...	4
13.	Halolao Bund, Newaie	...	...	...	...	4
14.	Amanishah Supply Cut	...	...	...	...	4
IRRIGATION WORKS (REPAIRS).						
15.	Raising 2 ft. Rabaota Bund	...	...	...	...	4
16.	Do. Chandlie Bund	...	...	...	...	4
17.	Repairs to Chandlie Bund and Canals	...	...	...	...	4
18.	Do. and Maintenance	...	...	...	...	5
19.	Surveys	...	...	...	...	5
20.	Heights of Water in the Tank	...	...	...	...	5
TONK ROAD, II SECTION—FROM MILE 16 <sup>TH</sup> TO 47 <sup>TH</sup> =32 MILES.						
21.	Expenditure	...	...	...	...	7
22.	Kunkur	...	...	...	...	7
23.	Consolidation	...	...	...	...	7



PARA.							<i>Page.</i>
24.	Earthwork	...	...	...	...	...	7
25.	Income	...	...	...	...	...	7
26.	Other Works	...	...	...	...	...	7
27.	Kothun and Lalsote Road	...	...	...	...	...	7
28.	Kutchha Roads	...	...	...	...	...	7
29.	Other Expenditure	...	...	...	...	...	7
30.	Imarat Final Bills	...	...	...	...	...	7
31.	Works in the Head Office	...	...	...	...	...	7

# ANNUAL REPORT of Lala Rup Chand, Assistant Engineer, P.W.D., Jaipur, for the year ending 31st December 1901.

1. Introduction.—This report contains a brief account of the working of the year.

2. Statement of Expenditure.—The expenditure during the year on works and establishment in charge of the Assistant Engineer has been Rs.93,080-14-3, of which the payments amounting to Rs.64,279-5-9 have been made through the Assistant Engineer's office and Rs.28,801-8-6 through the Superintending Engineer's office. The statement below shows the detail of receipt and expenditure transacted in Assistant Engineer's office books:—

Credit.	Amount.	Debit.	Amount.
	Rs. A. P.		Rs. A. P.
Last year's balance .. ..	6,787 5 9	By Miscellaneous advances account	2,245 6 0
To Superintending Engineer's account .. ..	67,537 7 6	„ Security Deposit. „ ..	322 2 6
„ Profit and Loss account ..	173 10 0	„ Unclaimed wages „ ..	14 10 9
„ Loss of tools .. ..	0 0 6	„ Assistant Engineer's office establishment .. ..	1,193 0 0
„ Fine account .. ..	8 0 0	„ Overseer's office establishment..	240 0 0
„ Sale of trees, &c., of road ..	110 12 9	„ Irrigation works ..	52,858 2 3
„ Grass account .. ..	3 0 0	„ Buildings .. ..	204 3 0
		„ Roads .. ..	4,180 15 3
		„ Famine Relief Works ..	3,020 14 0
		Total ..	64,279 5 9
		By balance in hand on 31st December 1901 .. ..	10,340 14 9
GRAND TOTAL ..	74,620 4 6	GRAND TOTAL ..	74,620 4 6

3. Rainfall and ratio of run off.—The rainfall during the year has been :—

	Inches.
At Boochara ... ..	6
At Ramgarh ... ..	8.78

The run off has been :—

At Boochara 42 per cent. or 2.5 inches.  
At Ramgarh 5.1 per cent. or .4 inches.  
At Sainthal 12.3 per cent. or 1.6 inches.

4. Plans and Estimates.—Seventeen plans and estimates have been prepared during the year.

5. Journal.—The Assistant Engineer's Journal shows the distance travelled in inspecting and checking the works in the districts by :—

	Miles.
Road ... ..	1,730
Rail ... ..	669
Total ... ..	2,399

N. B.—The rainfall at Nim ka Thana has been 12 inches; the run off calculated on this gives a percentage of 31 for Boochara.

6. Office works.—In the English office, besides the usual routine work, the following is a brief summary of the work done :—

613 Letters received and despatched.

957 Muster Rolls checked.

451 Day Books prepared.

292 Contractors' and other bills prepared and checked in detail.

55 Final bills prepared.

In the Persian office 6,500 papers received and despatched:

7. Testimony to Office establishment.—Lala Sheo Nath, in charge of the English office, has carried out his duties to my entire satisfaction. He was recommended for promotion more than once which he so well deserves.

2. Pandit Moti Lal, Assistant Clerk, has proved himself a useful hand.

Munshi Bhawani Charna in charge of Persian office has performed all the duties of the office satisfactorily.

Sub-treasurer Lala Ram Pertab has been making payment on all works under Assistant Engineer's direct charge and has done his work satisfactorily.

8. Sub-overseers.—Sayad Asgar Ali, in charge of Tonk Road Sub-Division, has done good work and given satisfaction. He with his sub-division was transferred to Babu K. N. Mookerjee, Assistant Engineer, in the beginning of September 1901.

Babu Nathu Lal has continued in charge of Ramgarh Irrigation Works, Main Dam section, and has done his work well.

Babu Dina Nath, sub-overseer, has been in charge of Ramgarh canal and has done all the surveys as well as earth and masonry works connected with the canal.

Babu Ganga Pershad, sub-overseer, has been employed in surveying and preparing estimates. At the latter part of the year he fell sick and remained on leave without pay for about five months.

## DISPENSARIES.

9. Dispensary Nim ka Thanah.—Contagious ward consisting of mud walls and thatched roof was built at a cost of Rs.202.

10. Dispensary Chaksu.—Petty repairs were done at a cost of Rs.2-3-0.

## ORIGINAL WORKS—IRRIGATION.

### RAMGARH IRRIGATION WORKS.

11. Ramgarh Irrigation works.—The description of this work was given in the previous annual reports.

Owing to scanty rainfall the tank only filled 37 ft. out of 70 ft. H. W. L. All the water stored is being used in irrigation. The detail of work done is as under :—

Main Dam.—The inner slope has been completed up to 70 ft. 1 in 4 and covered over with dry rubble pitching 18 inches thick throughout, to protect the earthwork from actions of water and wind. The outer slope has also been completed up to 70 ft. This will also have to be pitched with dry rubble as there is no other cheaper material available at the site keep down the sand from blowing away.

Looking at the result of the last two years' floods, it appears rather doubtful that the tank will ever fill, so it is quite unnecessary to build the dam to the full height proposed 90 ft. Hence it has been decided now to do away with the upper 20 ft. and to make only a thin bund 10 ft. high above the H. W. L. 70 ft. with top breadth 15 ft.

The retaining and corewalls have been duly finished up to 90 ft. as proposed. They will come in use when, after a time, the tank gets silted up and it becomes necessary to raise the H. W. L. and the dam. The earthwork has been done by tramway with side tipping wagons. The average lead being 2,000 ft., and trips made by each wagon worked by two men 20 per day.

The earthwork done during the year has been 3,305,272 c. ft. and up to date 24,094,449 c. ft., with working rate Rs.4-8-7 per  $\frac{1}{100}$  c. ft.

The dry rubble pitching has been done 268,684 c. ft. and the working rate Rs.2-3-8 per cent. c. ft.

The retaining wall and the centre corewalls have been very nearly completed.

**Outlet sluices.**—The work was completed last year. The top of the main wall, which is 13 ft. wide and serves as a roadway on the bund, has been provided with galvanized iron pipe railing and cutstone wheel guard parapets 12"  $\times$  15" for protection of men and animals passing over it.

**Road from Bund to Ramgarh.**—The old cart track near the bund has come under submersion, hence a new road has been taken out above the H. W. L. along the side of the hills. The first portion of it is in rock cutting and has been completed. The rest of the road up to Ramgarh has also been realigned and repaired. The cost has been Rs. 2,379-2-3.

**South Main Canal.**—The earthwork of the canal was completed last year, but most of the masonry works were remaining to be done. The works have been completed now and the water goes without any obstruction throughout its entire length.

**Aqueducts.**—The canal crosses two big nullahs, Daber and Newar, at miles 5th and 6th, and has been carried by masonry aqueducts. The Daber nullah aqueduct was completed last year. The Newar aqueduct has been built during the year. It has 3 spans of 15 ft. each, height of springing 8 ft. and waterway of canal 20 ft. wide between parapets. The top of the lower parapet has been made 4½ ft. wide by corbelling out masonry to serve as a foot path. The work was completed before rains and has answered well.

**Masonry falls.**—The canal has a fall of 105 ft. in 21½ miles. The bed slope given is from 2½ ft. to 3 ft. per mile, and the rest of it has been disposed off in 27 masonry falls. All of them are of one standard plan consisting of vertical falls of 2 ft. drop with water cushion 2 ft. deep.

They are also provided with cutstone grooved pillars in the main wall to put in planks, where necessary, for raising the level of water up above. Five of the falls were completed last year and the rest 22 have been constructed now.

**Rajbaha sluices.**—Most of the Rajbahas have been taken from the upper levels of the masonry falls to command higher land. All the Rajbaha sluices are of one standard plan, having one opening 3 ft. wide provided with cutstone grooves for plank and an arched culvert under the patri. The arrangement for locking the sluices has also been made so that no one can take water without permission. Twenty-eight Rajbaha sluices have been built during the year.

**Inlets.**—With exception of the two big nullahs mentioned above, all the rest of the drainage has been taken in the canal by masonry inlets to utilize all this water in filling tanks

below. They have vertical falls with water cushion to break the force of water. Five inlets with waterway from 10 to 30 ft. have been made during the year.

**Escape.**—A masonry escape has been provided at Jaisinghpura nullah, mile 8. It is 30 ft. long and has its sill 3 ft. above the bed of the canal; so that all the water rising above 3 ft. should pass off into the nullah without doing damage to the canal banks.

**Bridges.**—Two more bridges have been built during the year. The roadway between parapets is 12 feet. Both these bridges are provided with cutstone grooves at upstream side to raise the level of water, if necessary, and have Ghats for bathing purposes.

**Rajbahas.**—Thirty-four new Rajbahas of total length of 20.31 miles have been dug out during the year. They are from 3 to 6 ft. wide at bottom, with side slope 1 in 1 and bed slope from 2 to 3 ft. per mile.

**12. Sheodungri Bund.**—The description of this was given in last year's report. Most of the earthwork was done last year. The gap at the nullah bed has been closed up during the year. A Morinda corewall has also been built in the embankment across the nullah bed. All the water coming down the nullah was stored. The work has been very nearly completed now. The work has been :—

	Rs.	a.	p.
Earthwork 463,379 c. ft. at Rs.3-11-4 $\frac{1}{2}$ c. ft.	...	1,719	15 6
Morinda corewall 65,154 c. ft. at Rs.10-1-7 $\frac{1}{2}$	...	658	3 3

**13. Halolao Bund, Newaie.**—The work was commenced as a famine relief last year and mostly done through tehsildar, Newaie. The gap at the nullah bed has been filled up during the year and masonry outlet sluice provided. Following is the detail of work done :—

	Rs.	a.	p.
Earthwork 294,501 c. ft. at Rs. 4-9-0 $\frac{1}{2}$ ...	...	1,193	3 6
Morinda corewall 49,110 c. ft. at Rs.7-12-4 $\frac{1}{2}$ ...	...	381	10 0
Pucca masonry 2,895 c.ft. at Rs. 13-14-7 per cent. ...	...	402	14 0

**14. Amanishah Supply cut for Chandlie Bund.**—The most of the work was completed last year. Rupees 374-1-3 have been spent in this year.

#### IRRIGATION WORKS REPAIRS.

**15. Raising 2 ft. Rabaota Bund.**—The work was commenced last year. The earthwork has been completed now. Pucca corewall has also been extended 1,000 ft. out of proposed 1,200 ft. The detail of work is as under :—

	Rs.	a.	p.
.. Earthwork 75,262 c.ft. at Rs. 2-8-0 $\frac{1}{2}$ ...	...	188	7 9
Rubble work 9,249 c.ft. at Rs.14-2-10 per cent. ...	...	1,311	9 6

**16. Raising 2ft. Chandlie Bund.**—The work was commenced last year; it is nearly completed now. Only a portion of about 300 ft. near the Chowki remains to be done. Here there was no place to take the earth from, and the work cannot be done till the water in the tank dries up entirely: 523,415 c.ft. earthwork has been done during the year the working rate being Rs.3-3-1  $\frac{1}{2}$  c.ft.

**17. Repairs to Chandlie Bund and Canals.**—The work was completed last year. Rs. 196-12-3 have been spent in this year.

18. Repairs and Maintenance.—Rupees 1,419-5-9 have been spent on repairs to bunds and canals as per detail below :—

		Repairs.			Maintenance.		
		Rs. a. p.			Rs. a. p.		
1. Boochara ...	...	705	2	6	394	0	0
2. Sanganeer ...	...	80	7	3	31	8	0
3. Chandlie S. C.	...	...	...	...	27	9	0
4. Neota ...	...	...	...	...	72	0	0
5. Rawatwala	...	...	...	...	4	0	6
6. Matholao ...	...	11	6	6	...	...	...
7. Rabaota ...	...	7	14	6	2	2	0
8. Madhosinghpura	...	4	3	6	6	2	6
9. Lambia ...	...	2	8	9	2	15	9
10. Bairat ...	...	...	...	...	67	5	0
Total	...	811	11	0	607	10	9

19. Surveys.—The expenditure on surveys has been as under :—

		Rs. a. p.		
1. Lakhawas Bund ...	...	13	2	0
2. Nego Bund ...	...	472	10	9
3. Binori Sagar ...	...	48	5	6
4. Gungapore and Lalsote Road	...	24	8	6
5. Do. and Bharoti Road	...	93	2	9
6. Moran Sagar ...	...	177	14	9
7. Gatolao Tank ...	...	93	9	0
8. Rawatwala Tank ...	...	46	11	9
9. Baswa Project ...	...	179	9	6
10. Kothoon Lalsote Road	...	2	3	0

20. Heights of Water in the Tanks.—The heights of water in the tanks as filled during the last rainy season are as under :—

Name of Tank.	H. W. L.	Filled during the year.
Boochara	75	58
Bairat	15	7
Chandlie	10	6½
Sheodungri	22	20
Rawatwala	13	7
Lambia	10	4
Madhosinghpura	12	11
Rabaota	8	2½
Matholao	5	2½
Halolao	10	...
Khurr	40	25
Bheroan Sagar	7	6
Rayawala, big	21	2½
Rayawala, small	5	5
Nemla	15	12½
Sainthal	28	26
Ramawala	9	7½
Sinoli	16½	6½
Bhankri	6	3½
Haripura	8	5

Name of Tank.	W. H. L.	Filled during the year.
Gatolao	10	7½
Namolao, big	8	8
Dhund Sagar at Barial, small	7	2
Beeja Sagar	9¾	5¾
Dhapawan	7	2½
Khoond Jatoli	8	2
Gudha	6	2½
Moran	17	16
Nazimwala at Bamanwas	5	...
<i>Bizori</i>	17	12
Dekhan Sagar	10	5
Nenwari	10¼	5
Neya Talao	6	1½
Ghurla	5	4
Goojar Thikaria	8	8
Bharoti	13	5½
Nagla	11	3¾
Kharila	10	6
Durga Sagar	9	3
Bheem Sagar	9	7
Dhund Sagar at Malarna	8	5
Ram Sagar	8	8
Jey Sagar Toond	9	7½
Bohra ka Dand	4	4
Dhunawala Banri	2½	2½
Kote	6	5
Hurla	6	1
Rundh Jagrampura	3	1
Madho Sagar	35	25¾
Nazimwala	6½	2
Dharam Sagar	6½	4½
Johriwala	6½	6½
Ram Talao	6	4¼
Bara Talao	6	4
Telunwala	6	3
Newazwala	3	3
Salimpur	7	3
Ser kunderpur	10	6
Shampur	12	7
Bishansamand	26	11½
Futteh Sagar	16	8
<i>Dehla</i>	9	...
Hoda Heli	14	4
Mahuswa	11	8
Nahar Khora	9	4
Jhunkee	5	3
Jatwala	7	6
Julsein	...	9¾
Khari	18	12
Moti Sagar	8	2
Banyawala	5	...
New Tank at Baragaon	10	4

**TONK ROAD, II SECTION—FROM MILES 16TH TO 47TH—32 MILES.**

21. **Expenditure.**—The total expenditure up to 31st August has been Rs.11,768-1-6, after which the road was transferred to Babu K. N. Mookerjee, Assistant Engineer.

22. **Kunkur.**—Kunkur has been collected at miles Nos. 17,18, 21,24, 25, 29, 32 and 38.

				Rs.	a.	p.
For 3rd layer	166,659 c. ft.	...	...	...	7,827	15 0
„ repairs	1,048 „	...	...	...	48	7 0
Total	167,707 „	...	...	...	7,876	6 0

23. **Consolidation.**—Miles Nos. 21, 22, 29, 32 and 43 halves and miles Nos. 18, 24, 38 and 47 in full have been re-metalled and repairs done to others wherever necessary.

				Rs.	a.	p.
3rd Layer	306,528 s. ft.	...	...	...	1,770	4 6
Ordinary repairs	106,919 „	...	...	...	449	0 6
Rain repairs	11,456 „	...	...	...	43	9 3
Total	424,903 „	...	...	...	2,262	14 3

24. **Earthwork.**—Patris of miles Nos. 18, 19, 21, 22, 32 and 47 and others wherever necessary have been repaired :—

				Rs.	a.	p.
3rd Layer	142,137 c. ft.	...	...	...	264	1 9

25. **Income.**—Income from the road during the year has been Rs.110-12-9 as per detail below :—

				Rs.	a.	p.
Babul patras	...	...	...	...	54	3 0
Dry trees	...	...	...	...	56	9 9
Total	...	...	...	...	110	12 9

26. **Other works.**—Other works in connection with this road have been :—

				Rs.	a.	p.
(a) Thatching chupper of Chowki at Nawaie	...	...	...	...	98	13 3
(b) Repairing chupper of Chaksu dak bungalow	...	...	...	...	26	14 0
(c) Road Dam Mile No. 31	...	...	...	...	15	1 0

27. **Kothun and Lalsote Road.**—The work was completed last year. Rupees 145-7-0 have been spent in this year.

28. **Kutchia Roads.**—Rupees 359-15-9 have been spent on kutchia roads during the year as per detail below :—

				Rs.	a.	p.
Jaipur to Ramgarh	...	...	...	...	258	15 6
Sheodaspura to Chandlie	...	...	...	...	79	9 0
Tonk and Deoli Road	...	...	...	...	21	7 3

29. **Other expenditure.**—Other expenditure through the Assistant Engineer's office has been :—

				Rs.	a.	p.
Assistant Engineer's office establishment	...	...	...	...	1,193	0 0
Establishment charged to Eastern District	...	...	...	...	360	0 0

30. **Imarat Final bills.**—Disposed of 77 Imarat Final bills after going through such items which admitted of check.

31. **Works in the Head Office.**—Worked in the Head office for a total of 128 days.

RUPCHAND,  
Assistant Engineer,  
JAIPUR.